

December 31, 2015



## North Dakota State Investment Board Pension Funds

Investment Measurement Service  
Quarterly Review

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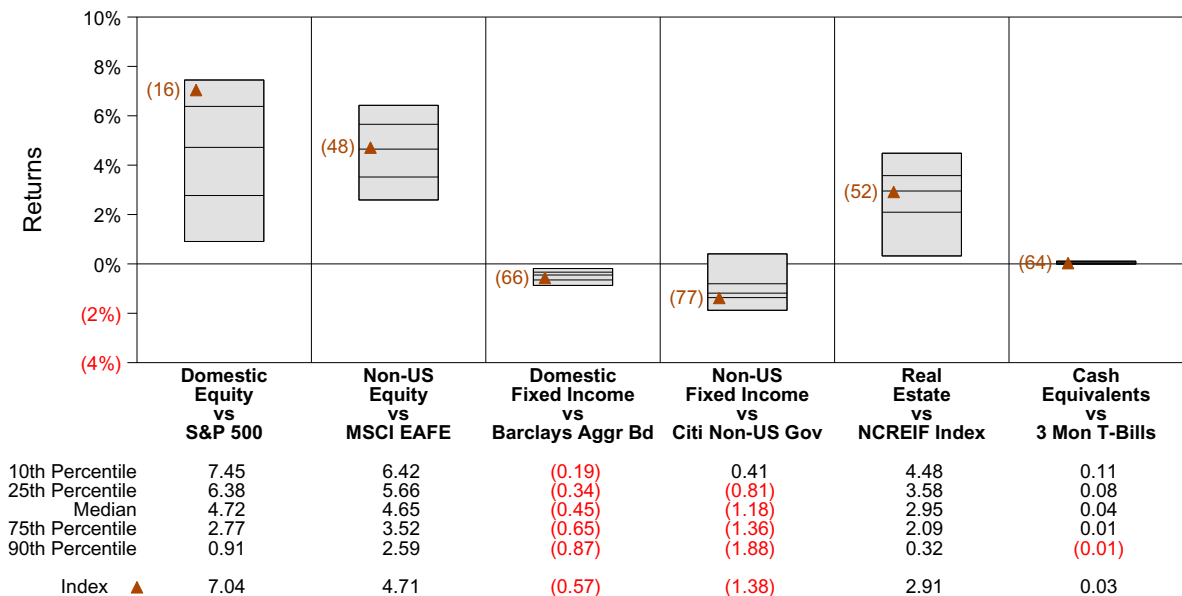
## Market Overview

### Active Management vs Index Returns

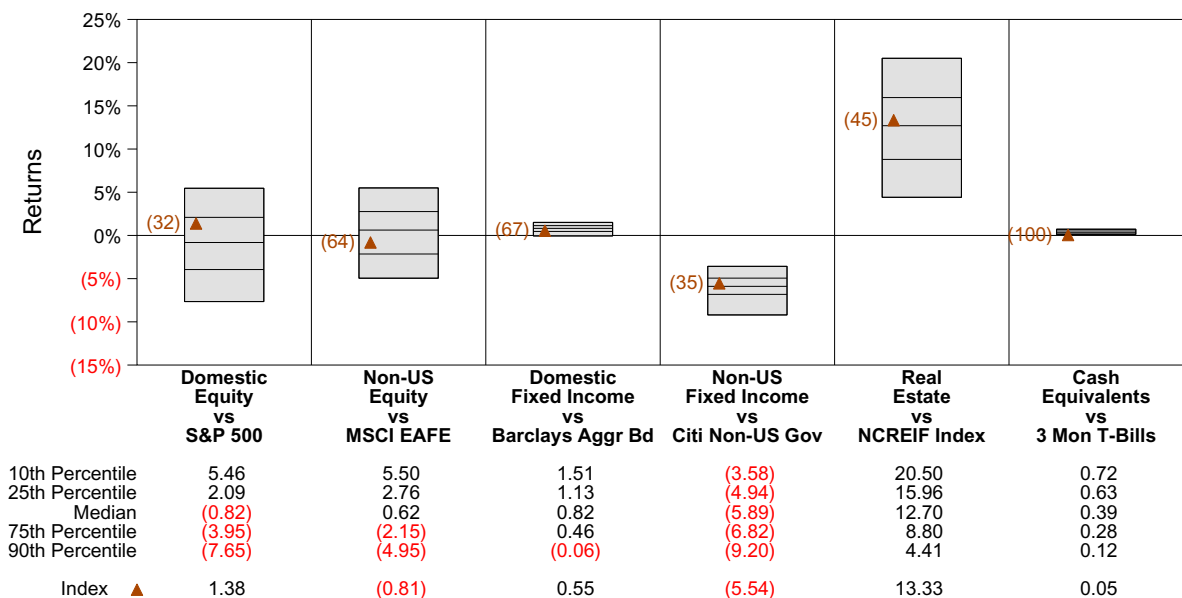
#### Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the domestic equity manager database.

#### Range of Separate Account Manager Returns by Asset Class One Quarter Ended December 31, 2015



#### Range of Separate Account Manager Returns by Asset Class One Year Ended December 31, 2015



Fourth Quarter 2015

## Unwarranted Pessimism?

### ECONOMY

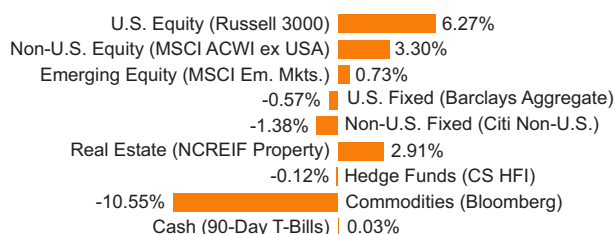
**2** The global economy seemed to improve as 2015 unfolded, but market sentiment turned sharply negative as the year drew to a close. Moderate growth continued through the third and fourth quarters, particularly in the U.S., and GDP grew 2.4% for the year.

## A Rocky Road to Revival

### FUND SPONSOR

**4** Despite preceding quarters marked with volatility, equities displayed a brief revival. Endowment/foundations and public funds performed well, ahead of other fund types. Corporate plans saw a small improvement in funded ratio over both the quarter and the year.

## Broad Market Quarterly Returns



Sources: Barclays, Bloomberg, Citigroup, Credit Suisse Hedge Index, Merrill Lynch, MSCI, NCREIF, Russell Investment Group

## Back in Black

### U.S. EQUITY

**6** With the strongest quarter of the year (+7.04%), the **S&P 500 Index** was able to finish 2015 in the black (+1.38%). All capitalization ranges advanced, though larger performed better for the second consecutive quarter (**Russell 1000 Index**: +6.50% and **Russell 2000 Index**: +3.59%).

## Tech Takes Over

### NON-U.S. EQUITY

**9** Non-U.S. markets were propped by surging merger activity, robust tech sector gains, and stronger-than-expected corporate profits during the fourth quarter. Although the **MSCI Emerging Markets Index** (+0.73%) barely broke even, the developed **MSCI World ex USA Index** rose 3.91%.

## Take It Easy

### U.S. FIXED INCOME

**12** Bond markets stuttered in the U.S. after the Federal Reserve announced a rate increase. The yield curve flattened and spreads were mixed. The **Barclays Aggregate Index** dropped 0.57%; the **Barclays Corporate High Yield Index** slumped 2.07%.

## Slip 'n Slide

### NON-U.S. FIXED INCOME

**15** The U.S. dollar continued its appreciation as the benchmark's hedged equivalent returned 0.58% for the quarter and 1.55% for the year. The **Citi Non-U.S. World Government Bond Index** declined 1.38% for the quarter and 5.54% for the year.

## A Straight but Bumpy Road

### REAL ESTATE

**17** The **NCREIF Property Index** advanced 2.91%. The quarter saw 210 asset trades, representing \$11.3 billion of transactional volume, comfortably ahead of the \$5.1 billion 10-year average and the prior 10-year peak of \$8.7 billion in the second quarter of 2007.

## Level at 35,000 Feet

### PRIVATE EQUITY

**19** Decelerating from 2014's high-velocity market, most private equity measures were flat-to-down in 2015—albeit at relatively high absolute measures. While the first half of the year was strong, the second half showed a notable pullback.

## Under Pressure

### HEDGE FUNDS

**20** Growing unease with economic change is evident in the capital markets. Commodity prices slid further, led by oil, as China struggled with its centrally planned shift to a consumer-driven economy.

## Chasing the Market

### DEFINED CONTRIBUTION

**21** Almost three-fourths of the asset classes in the DC Index experienced net outflows in the third quarter. But for the first time in two years, stable value experienced net inflows.

# Unwarranted Pessimism?

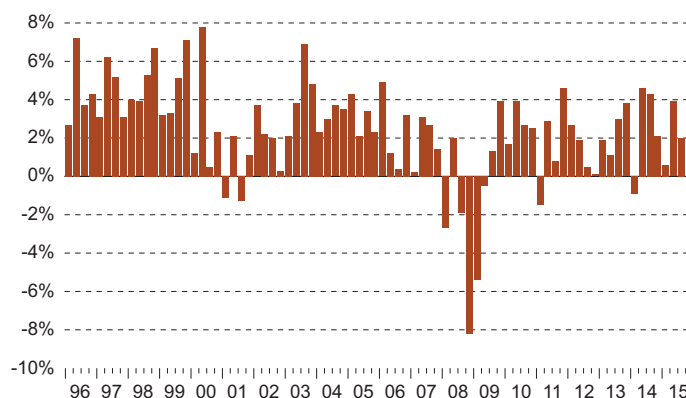
ECONOMY | Jay Kloepfer

The global economy seemed to improve as 2015 unfolded, but market sentiment turned sharply negative as the year drew to a close. Is this pessimism warranted? The data instead suggests that moderate growth continued through the third and fourth quarters, particularly in the U.S. After a slow start to the year, real GDP in the U.S. grew 3.9% in the second quarter and 2.0% in the third. GDP growth slowed to just 0.7% in the fourth quarter, pulled down by an inventory cycle, the plunge in energy-sector capital spending, and pain in the manufacturing sector and exports in general due to a strong dollar. Solid growth in consumer spending and housing provided enough of a sound foundation to fight these headwinds and keep the U.S. economy on a modest growth path. GDP grew 2.4% for the year, matching 2014. Growth in non-U.S. developed markets is relatively weak but continued to firm up; both Japan and Europe reported GDP growth of 1.6% in the third quarter.

Consumer spending in the U.S. has been supported by solid gains in the job market, real disposable income, and a recovery in housing asset values. December saw a gain of 292,000 jobs, the highest monthly gain in 2015. Payrolls climbed by 2.65 million over the year for an average of 221,000. Unemployment fell to 5.0% in October and held steady through December, as the labor force surged. With the Fed focused on unemployment and the labor force, the December jobs report certainly supported the Fed's decision to raise interest rates. As the year drew to a close, the outlook for consumers was positive, and will likely remain so. The University of Michigan's Index of Consumer Confidence slipped from a reading of 98 at the start of 2015 to 87 in the third quarter when global equity markets were roiled by China, but confidence surged back to a reading of 93 through the last three months of the year. For reference, a reading above 80 suggests a positive outlook by consumers. Real disposable (after-tax) income grew an estimated 3.6% in 2015, fueling a 2.2% rise in consumption spending. Auto sales surged to 17.4 million units in 2015, up from 16.4 million in 2014 and 14.4 million in 2012. Pent-up demand may finally be close to satisfied.

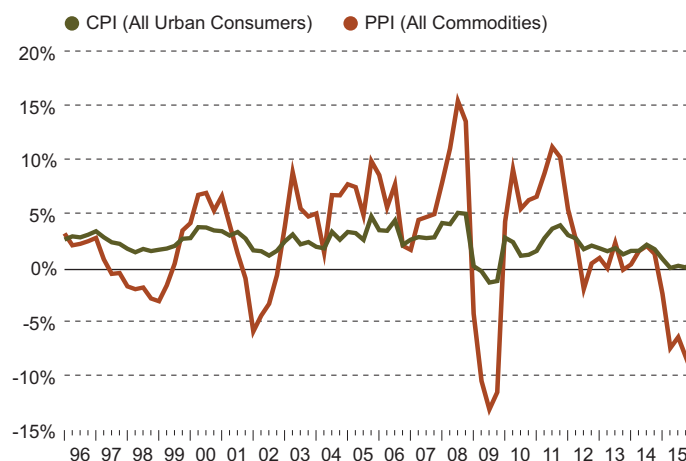
## Quarterly Real GDP Growth

(20 Years)



Source: Bureau of Economic Analysis

## Inflation Year-Over-Year



Source: Bureau of Labor Statistics

Consumers clearly benefitted from falling energy prices. Lower gasoline prices provide an effective boost to disposable income. Oil peaked at \$135 per barrel in July 2008, started 2015 at \$52, and closed the year at \$38 (the Brent crude spot price). The impact of energy on the measure of inflation is significant. U.S. Core CPI, which excludes energy and food, stood at 2.25% for December (measured year-over-year). Headline CPI, which includes energy, held near zero for most of the

year. Once energy prices stabilize, we expect they will cease to have the same disinflationary impact and will begin to add volatility to headline CPI. Similar forces are affecting Europe, where headline inflation is also close to zero; much of peripheral Europe is mired in deflation.

The rise in the value of the dollar has complicated the measure of price inflation for consumers. Versus a trade-weighted basket of major currencies, the dollar was up approximately 10% over the course of 2015. Prices of imports fell for consumers, adding to disinflationary pressures. On the other hand, exports become more expensive, and U.S. manufacturing has clearly suffered from the dollar's upward move. The ISM Index for manufacturing fell to 48.2 in December, its lowest level since June 2009. A reading below 50 suggests contraction in activity. Adding to the pressure on manufacturing from a strong dollar, inventories were built earlier in 2015 and in 2014 in anticipation of stronger global growth, and these inventories are now being worked down, further reducing the need for manufacturing output. The ISM Index for non-manufacturing remained above 50, with a reading of 55.3 in December, but this is the lowest level in almost two years.

On balance, the economic data show modest growth continuing in the U.S., although the rate is substantially below that of previous recoveries. GDP growth has averaged close to 2.2% since 2010, compared to the 3% or higher achieved in the past.

### The Long-Term View

Index	2015 4th Qtr	Periods ended December 31, 2015			
		Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	6.27	0.48	12.18	7.35	10.03
S&P 500	7.04	1.38	12.57	7.31	9.82
Russell 2000	3.59	-4.41	9.19	6.80	10.50
Non-U.S. Equity					
MSCI EAFE	4.71	-0.81	3.60	3.03	5.40
MSCI Emerging Markets	0.73	-14.60	-4.47	3.95	8.63
S&P ex-U.S. Small Cap	5.21	5.92	5.51	5.33	6.80
Fixed Income					
Barclays Aggregate	-0.57	0.55	3.25	4.51	6.15
90-Day T-Bill	0.03	0.05	0.07	1.24	2.93
Barclays Long G/C	-0.94	-3.30	6.98	6.45	8.08
Citi Non-U.S. Govt	-1.38	-5.54	-1.30	3.05	5.37
Real Estate					
NCREIF Property	2.91	13.33	12.18	7.76	8.05
FTSE NAREIT Equity	7.26	3.20	11.96	7.41	12.13
Alternatives					
CS Hedge Fund	-0.12	-0.71	3.55	4.97	—
Cambridge PE*	—	11.38	16.03	12.65	15.73
Bloomberg Commodity	-10.52	-24.66	-13.47	-6.43	—
Gold Spot Price	-4.93	-10.46	-5.70	7.41	4.02
Inflation – CPI-U	-0.60	0.73	1.53	1.86	2.30

\*Private equity data is time-weighted return for periods ended June 30, 2015.

Sources: Barclays, Bloomberg, Citigroup, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge, Bureau of Economic Analysis.

### Recent Quarterly Indicators

Economic Indicators	4Q15	3Q15	2Q15	1Q15	4Q14	3Q14	2Q14	1Q14
Employment Cost–Total Compensation Growth	2.0%	2.0%	2.0%	2.6%	2.2%	2.2%	2.0%	1.8%
Nonfarm Business–Productivity Growth	-0.5%*	2.2%	3.5%	-1.1%	-2.2%	3.1%	2.8%	-3.5%
GDP Growth	0.7%	2.0%	3.9%	0.6%	2.1%	4.3%	4.6%	-0.9%
Manufacturing Capacity Utilization	76.1%	76.3%	75.9%	75.9%	76.2%	75.7%	75.1%	74.2%
Consumer Sentiment Index (1966=100)	91.3	90.8	94.2	95.5	89.8	83.0	82.8	80.9

\*Estimate.

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan.

# A Rocky Road to Revival

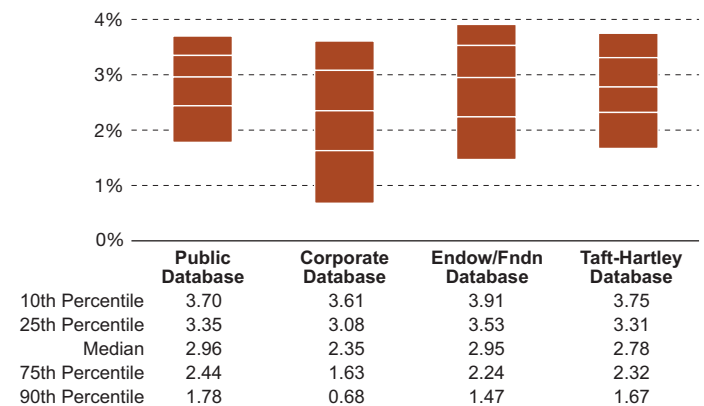
FUND SPONSOR | Rufash Lama

Despite preceding quarters marked with volatility, global equities displayed a brief revival, particularly in October. Central banks in Japan and Europe affirmed their decision to increase accommodative policies to support their respective economies. For the quarter, U.S. equity markets edged ahead of non-U.S. (**Russell 3000 Index: +6.27%, MSCI EAFE Index: +4.71%**) while both U.S. and non-U.S. fixed income markets retreated (**Barclays Aggregate Index: -0.57%, Citi Non-U.S. World Government Bond Index: -1.38%**).

Performance varied, albeit marginally, for the different fund types. Endowment/foundations and public funds performed well, leading across all percentiles. Corporate plans, although positive, trailed the other plan types. We have observed a continued divergence between different asset owners as corporate plans seek to de-risk. While performance dispersion was modest, in the 90th percentile public plans surpassed corporate plans by 1.10%.

Following December's interest rate hike, bond strategies saw substantial outflows on concerns about high-yield issuers, to the dismay of corporate plans. Corporate plans saw a small improvement in funded ratio over both the last quarter and the year. The median and average funded status of U.S. corporate defined

## Callan Fund Sponsor Returns for the Quarter



Source: Callan

benefit plans were 82.7% and 83.0%, respectively, based on a peer group\* of seven different funded ratio measures. Over the year, liabilities fell as interest rates rose, while asset returns in both equity and fixed income were flat.

Endowment/foundations performed well due to an overweight to U.S. stocks and relatively low exposure to U.S. fixed income. Despite trailing in the 10- and 15-year periods, Taft Hartley plans have performed best in the three- and five-year periods primarily due to their relatively high exposure to real estate and low exposure to non-U.S. equities.

## Callan Database Median and Index Returns\*\* for Periods ended December 31, 2015

Fund Sponsor	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Public Database	2.96	0.33	7.50	6.99	5.78	5.64
Corporate Database	2.35	-0.97	6.33	6.95	5.89	5.64
Endowments/Foundations Database	2.95	-0.75	6.58	6.21	5.55	5.46
Taft-Hartley Database	2.78	1.15	8.02	7.31	5.51	5.38
Diversified Manager	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Asset Allocator Style	3.04	-1.07	7.85	7.45	6.15	5.92
U.S. Balanced Database	2.98	-0.89	7.34	6.71	5.76	5.70
Global Balanced Database	1.67	-1.88	4.65	5.07	5.25	6.73
60% Russell 3000 + 40% Barclays Agg	3.53	0.66	9.40	8.82	6.65	5.70
60% MSCI World + 40% Barclays Gbl Agg	2.93	-1.61	5.05	5.02	4.76	4.62

\* The peer group includes funded ratio measures provided by large, institutional investment and actuarial consultants, as well as investment management firms.

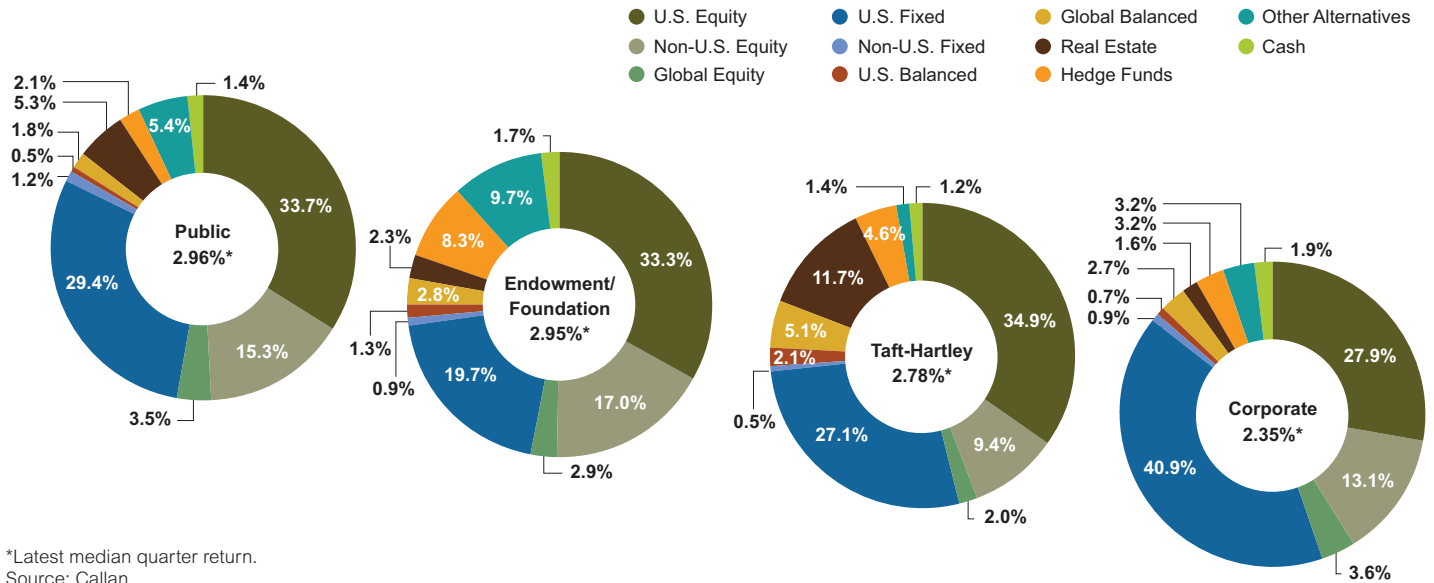
\*\*Returns less than one year are not annualized.

Sources: Callan, Barclays, MSCI, Russell Investment Group.

As of the most recent quarter, all fund types have displayed performance within a 5–6% range over longer time frames. A U.S.-focused benchmark of 60% Russell 3000 + 40% Barclays Aggregate (+3.53%) now outperforms the broader, 60% MSCI

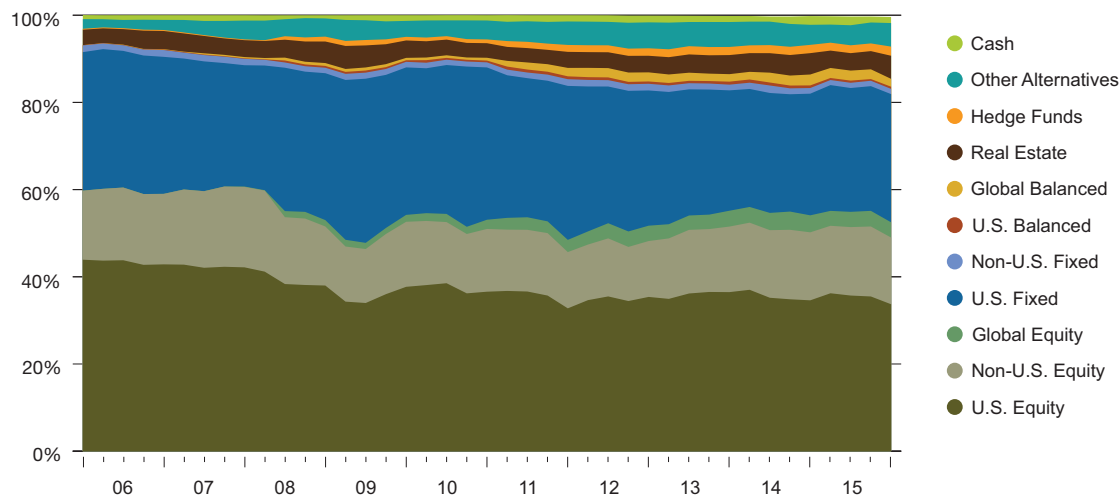
World + 40% Barclays Global Aggregate (+2.93%) benchmark over multiple time periods. Callan's U.S. Balanced Database group has outperformed the Global Balanced Database group in all periods except 15 years.

### Callan Fund Sponsor Average Asset Allocation



### Callan Public Fund Database Average Asset Allocation

(10 Years)



Source: Callan

# Back in Black

U.S. EQUITY | Lauren Mathias, CFA

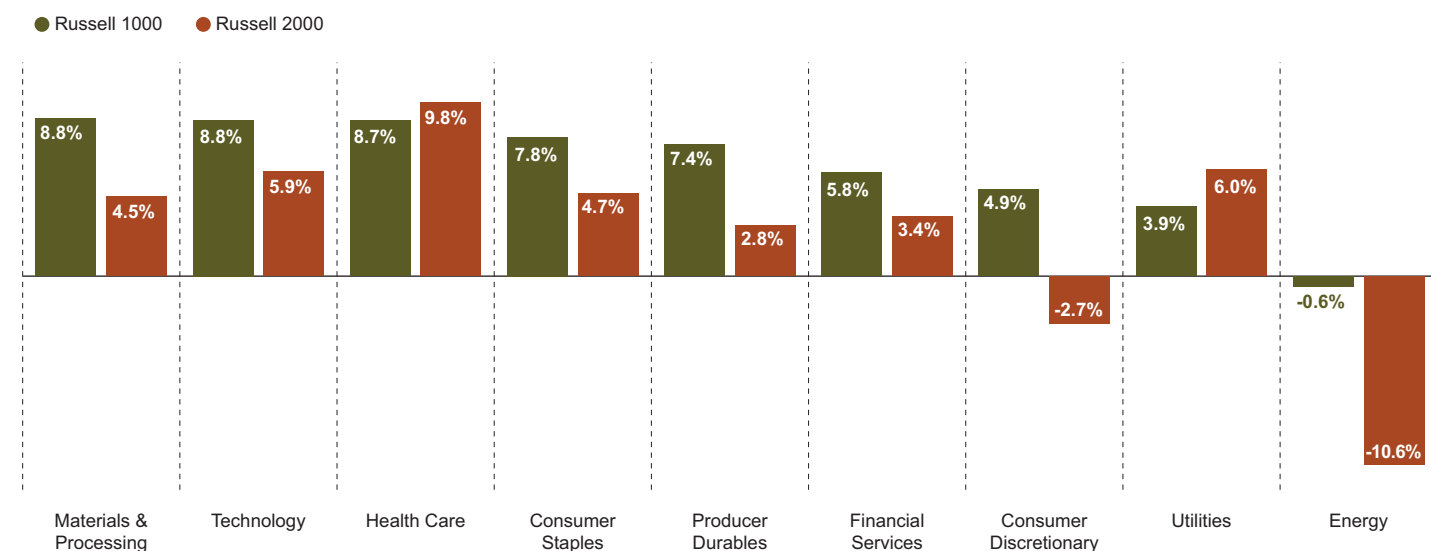
Although the fourth quarter was the strongest of the year, the journey was volatile. October proved to be a welcome turn-around after a stumbling third quarter as U.S. indices landed one of their strongest single months since the financial crisis (**S&P 500 Index**: +8.44% in October). Yet a slowing Chinese economy, other weak emerging markets, commodity price declines, and the strength of the U.S. dollar led to a middling November and disappointing December. Despite this, the U.S. Federal Reserve deemed the U.S. economy to be in a strong enough position for a rate increase, citing improved labor market conditions and subdued inflation. The price of oil continued to decline, and consumer confidence remained above average and provided a small tailwind to the market.

Growth continued to build its lead on value in the fourth quarter (**Russell 1000 Growth Index**: +7.32% and **Russell 1000 Value Index**: +5.64%); over the year the difference was profound

(+5.67% vs. -3.83%, respectively). All U.S. equity indices posted positive results, but larger proved better (**Russell Midcap Index**: +3.62%, **Russell 2000 Index**: +3.59%, and **Russell Microcap Index**: +3.74%). The **Russell Top 50 Index** led the way gaining 9.34%.

Large cap sectors continued their strong performance, led by Materials & Processing, Technology, and Health Care. In small cap, Energy trailed significantly, Health Care produced the strongest positive result, and only Consumer Discretionary showed a strong directional difference. Commodity price declines and slow global growth were major factors behind Energy's stumble. Biotech companies led small cap Health Care. Active managers struggled again in such a narrow market, especially in large cap where the S&P 500 Index total annual return (with dividends) would have been negative without three stocks: Amazon, Microsoft, and GE. Investors

## Economic Sector Quarterly Performance



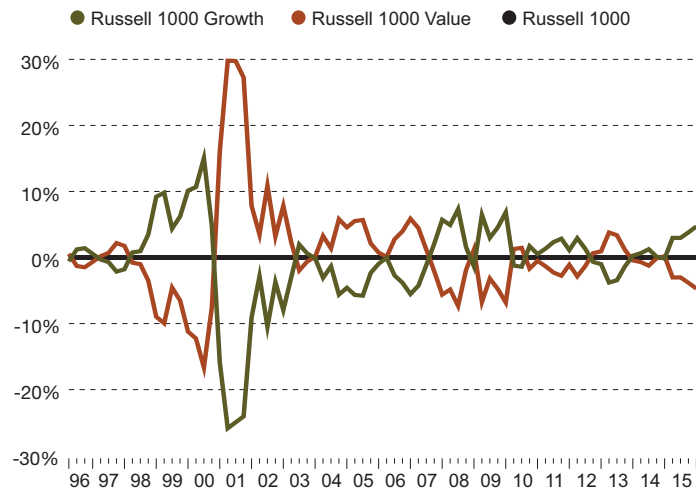
Source: Russell Investment Group

Note: As of the fourth quarter of 2015, the Capital Markets Review reports sector-specific return using the Russell Global Sectors (RGS) classification system rather than the Global Industry Classification Standard (GICS) system. RGS uses a three-tier classification system containing nine sectors; GICS uses a four-tier system containing ten sectors.

preferred the safety of these and other large-cap companies. Equity volatility as measured by the VIX increased during the quarter but ended the year below average. Assets continued to flow into passive funds and ETFs, further challenging active managers.

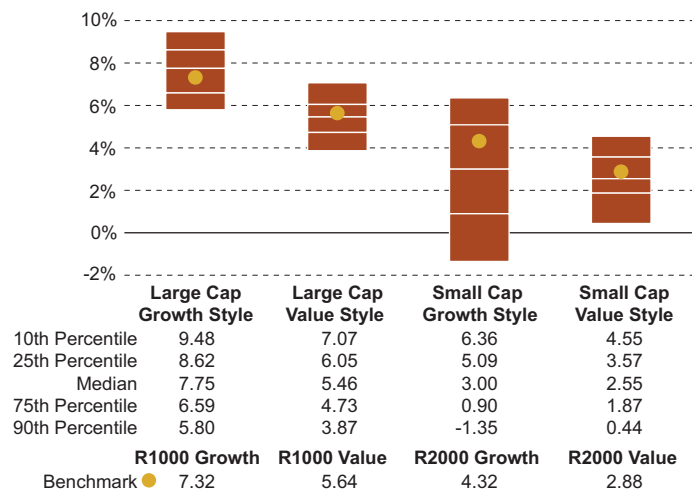
The U.S. equity market was generous in the fourth quarter, but for the full year four stocks were down for every three that rose (in the S&P 500). Despite this, broad market valuations remain above average, leading to questionable prospects as we enter 2016.

### Rolling One-Year Relative Returns (vs. Russell 1000)



Source: Russell Investment Group

### Callan Style Group Quarterly Returns



Sources: Callan, Russell Investment Group

### U.S. Equity Index Characteristics as of December 31, 2015

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Cap Range Min (\$mm)	1,360	2	149	149	2	2
Cap Range Max (\$bn)	586.86	606.41	606.41	28.85	12.06	6.42
Number of Issues	504	2,968	1,018	818	2,460	1,988
% of Russell 3000	81%	100%	92%	27%	17%	8%
Wtd Avg Mkt Cap (\$bn)	128.44	106.38	115.12	12.09	4.06	1.88
Price/Book Ratio	2.7	2.6	2.6	2.3	2.0	1.9
Forward P/E Ratio	16.3	16.7	16.5	17.9	18.1	18.8
Dividend Yield	2.2%	2.1%	2.1%	1.9%	1.7%	1.6%
5-Yr Earnings (forecasted)	10.3%	10.9%	10.7%	10.9%	12.1%	13.2%

Sources: Russell Investment Group, Standard & Poor's.

## U.S. EQUITY (Continued)

### Callan Style Median and Index Returns\* for Periods ended December 31, 2015

Large Cap Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Large Cap Core Style	6.59	1.38	15.48	12.59	7.76	5.77
Large Cap Growth Style	7.75	6.43	17.03	13.23	8.65	4.82
Large Cap Value Style	5.46	-2.56	13.76	11.70	7.01	6.84
Aggressive Growth Style	5.12	5.53	16.47	11.59	8.71	5.30
Contrarian Style	4.90	-4.29	13.05	11.00	6.91	7.33
Yield-Oriented Style	5.78	-2.99	11.91	10.91	7.32	7.12
Russell 3000	6.27	0.48	14.74	12.18	7.35	5.39
Russell 1000	6.50	0.92	15.01	12.44	7.40	5.25
Russell 1000 Growth	7.32	5.67	16.83	13.53	8.53	4.33
Russell 1000 Value	5.64	-3.83	13.08	11.27	6.16	5.86
S&P Composite 1500	6.59	1.01	14.84	12.35	7.39	5.39
S&P 500	7.04	1.38	15.13	12.57	7.31	5.00
NYSE	4.11	-4.09	9.14	9.39	6.25	5.55
Dow Jones Industrials	7.70	0.21	12.66	11.30	7.75	5.80
Mid Cap Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Mid Cap Core Style	3.61	0.15	15.13	12.33	8.31	9.28
Mid Cap Growth Style	3.04	0.28	14.04	11.02	8.69	6.88
Mid Cap Value Style	3.23	-2.95	13.46	11.02	8.46	10.13
Russell Midcap	3.62	-2.44	14.18	11.44	8.00	8.15
S&P MidCap 400	2.60	-2.18	12.76	10.68	8.18	8.32
Small Cap Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Small Cap Core Style	3.23	-1.80	13.86	11.38	8.04	9.88
Small Cap Growth Style	3.00	-1.29	14.29	11.06	8.36	7.10
Small Cap Value Style	2.55	-3.82	12.43	10.30	7.87	10.68
Russell 2000	3.59	-4.41	11.65	9.19	6.80	7.28
S&P SmallCap 600	3.72	-1.97	13.57	11.48	8.00	8.92
NASDAQ	8.71	6.96	19.80	14.97	9.72	5.75
Smid Cap Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Smid Cap Broad Style	2.86	-0.99	13.35	11.31	8.66	9.41
Smid Cap Growth Style	2.86	-0.37	13.99	11.70	8.61	8.03
Smid Cap Value Style	2.00	-3.85	11.96	9.99	8.13	10.42
Russell 2500	3.28	-2.90	12.46	10.32	7.56	8.08
S&P 1000	2.93	-2.11	13.02	10.92	8.11	8.48
Russell 3000 Sectors	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Consumer Discretionary	4.28	4.95	17.50	16.16	10.00	—
Consumer Staples	7.72	7.96	17.46	15.28	11.93	—
Energy	-0.93	-23.11	-4.56	-1.47	2.98	—
Financial Services	5.58	0.68	15.58	11.48	1.53	—
Health Care	8.81	7.14	24.32	20.51	11.22	—
Materials & Processing	8.32	-8.52	6.34	5.74	6.15	—
Producer Durables	6.99	-3.45	14.27	11.11	6.76	—
Technology	8.57	4.04	16.86	12.29	9.46	—
Utilities	4.06	-1.74	9.66	9.81	7.27	—

\*Returns less than one year are not annualized.

Sources: Callan, Dow Jones & Company, Russell Investment Group, Standard & Poor's, The NASDAQ Stock Market.

# Tech Takes Over

NON-U.S. EQUITY | Irina Sushch

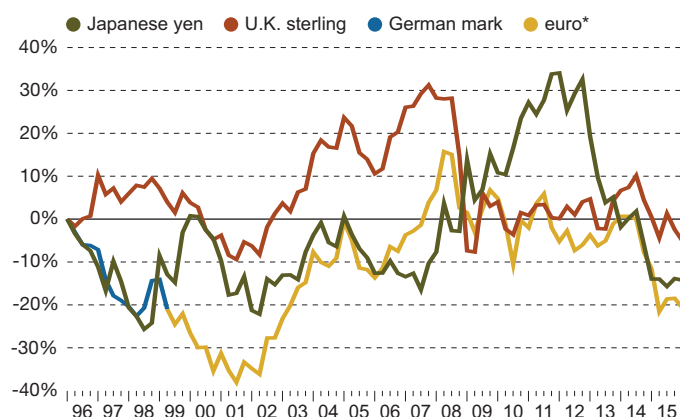
Surging merger activity, robust tech sector gains, and stronger-than-expected corporate profits drove a positive fourth quarter for non-U.S. markets (**MSCI ACWI ex USA Index**: +3.30%). Total global M&A volume in 2015 surpassed \$4.3 trillion, breaking the previous record set in 2007. Companies were persuaded to sign deals by the availability of cheap debt and the desire to stay competitive and efficient in a slow-growth environment. The strengthening dollar boosted returns of international export-oriented companies.

As in the U.S., growth (**MSCI ACWI ex USA Growth**: +5.04%) fared better than value (**MSCI ACWI ex USA Value**: +1.50%). **The MSCI Emerging Markets Index** (+0.73%) delivered paltry returns in comparison to its developed-market counterpart the **MSCI World ex USA Index** (+3.91%). Small cap outpaced large cap once again due to fewer Energy holdings (**MSCI ACWI ex USA Small Cap Index**: +5.28%). Among sectors, Information Technology (+8.40%) was the darling, while Industrials (+4.67%) and Consumer Discretionary (+4.59%) helped with high M&A activity. Energy (-0.43%) and Materials (+0.36%) have now lagged for two straight quarters. Crude oil ended the year below \$40 per barrel, down 17.85% for the quarter, due to unrelenting excess supply over global demand.

European stocks were up for the first two months of the quarter due to investor expectations of amplified European Central Bank (ECB) stimulus measures. Investors were disappointed in December when the central bank cut its deposit rate by only 0.10%, and extended the existing bond-buying program by six months. Returns faltered, yet the **MSCI Europe Index** ended the quarter up 2.49%.

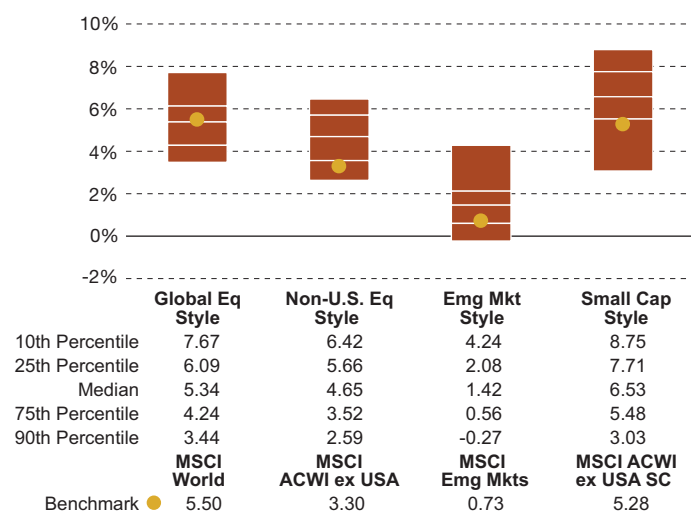
Japanese stocks closed the year on a high note (**MSCI Japan**: +9.34%; YTD: +9.57%). The weak yen boosted automobile companies, and health care companies fared well due to robust drug pipelines. The country also completed the largest state asset sale since 1987 with the privatization of Japan Post Holdings, accompanied by ramped up stimulus measures. The

## Major Currencies' Cumulative Returns (vs. U.S. Dollar)



\*euro returns from 1Q99  
Source: MSCI

## Callan Style Group Quarterly Returns



Sources: Callan, MSCI

remainder of Southeast Asia and the Pacific also enjoyed gains (**MSCI Pacific ex Japan Index**: +8.29%). New Zealand led the pack, up 18.15%, due to increased tourism and the positive impact of Industrials and Materials. Australia thrived (+9.96%) on a strong financial sector; the largest Aussie banks raised home-loan rates.

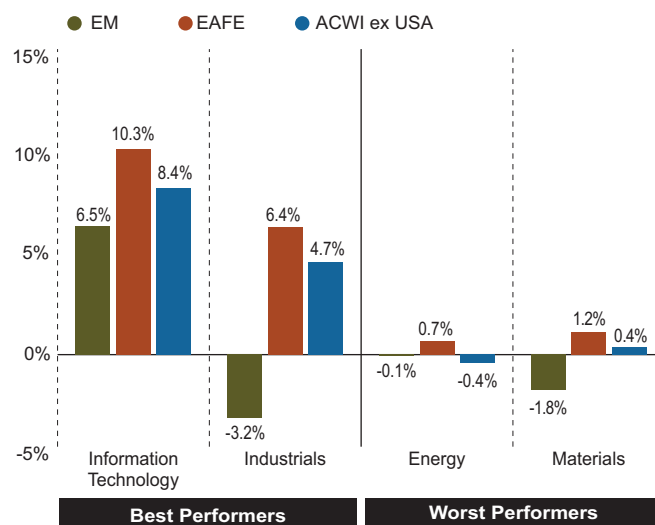
## NON-U.S. EQUITY (Continued)

Emerging market countries produced a spectrum of returns, but collectively closed slightly ahead (+0.73%). Information Technology (+6.46%) buoyed returns. Insecurities about U.S. monetary policy were assuaged by the U.S. Federal Reserve raising rates. China (+4.03%) was more even-tempered than last quarter. Its central bank cut interest rates once again, part of an ongoing stream of stimulus measures to fuel consumption. China's currency, the renminbi, will join the dollar, euro, pound, and yen in the International Monetary Fund's basket of reserve currencies later in 2016. The rest of emerging Asia also had a positive quarter (**MSCI Emerging Markets Asia Index**: +3.53%). Indonesia gained 20.87%, with significant advances in all sectors, thanks to progressive policies and reforms pursued by the government.

On the negative end, Greece's financial woes continued (-18.99%). Russian stocks declined 3.99% as the economy deteriorated further. Emerging Europe sank 5.13%. The Middle East did not fare well amid ongoing political turbulence and declining

oil prices. South Africa plummeted 10.51% with losses in the financials sector and ongoing political instability. Latin America (-2.61%) had another miserable quarter. Brazil dropped 3.16%, and its debt rating was cut to below investment grade.

### Quarterly Returns: Strong and Struggling Sectors



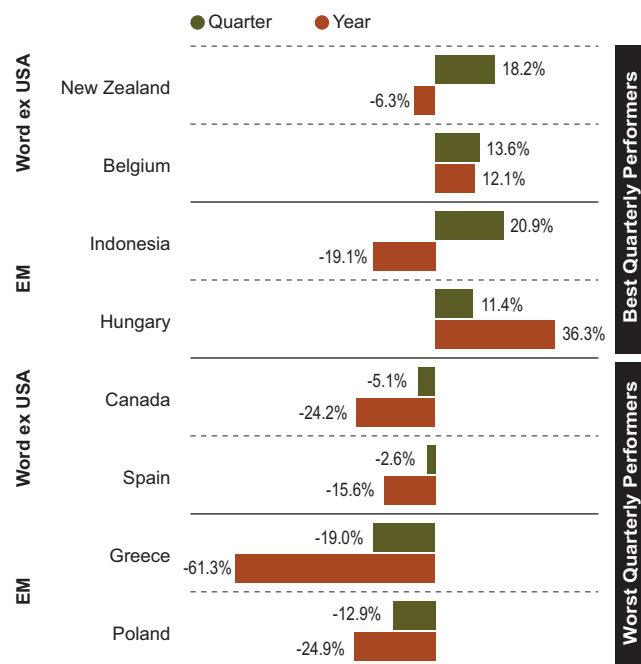
Source: MSCI

### Quarterly Return Attribution for EAFE (U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	9.96%	6.13%	3.60%	6.84%
Austria	6.85%	9.80%	-2.68%	0.18%
Belgium	13.64%	16.77%	-2.68%	1.43%
Denmark	6.69%	9.67%	-2.72%	1.90%
Finland	9.64%	12.67%	-2.68%	0.90%
France	1.67%	4.47%	-2.68%	9.74%
Germany	7.70%	10.67%	-2.68%	9.10%
Hong Kong	6.01%	6.01%	0.00%	3.09%
Ireland	6.99%	9.94%	-2.68%	0.40%
Israel	8.91%	7.90%	0.87%	0.76%
Italy	-2.32%	0.38%	-2.68%	2.36%
Japan	9.34%	9.83%	-0.44%	23.44%
Netherlands	3.14%	6.11%	-2.68%	2.88%
New Zealand	18.15%	10.40%	7.02%	0.16%
Norway	-0.52%	3.22%	-3.63%	0.55%
Portugal	4.23%	7.11%	-2.68%	0.15%
Singapore	4.24%	4.01%	0.23%	1.25%
Spain	-2.55%	0.14%	-2.68%	3.18%
Sweden	2.43%	2.96%	-0.52%	2.87%
Switzerland	2.04%	4.54%	-2.39%	9.41%
U.K.	0.73%	3.52%	-2.70%	19.39%

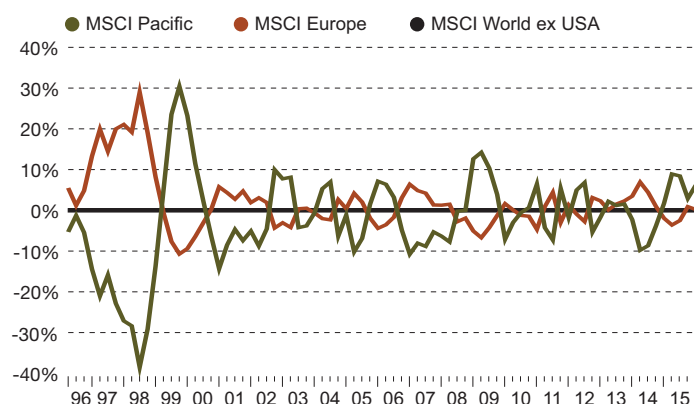
Sources: MSCI, Russell Investment Group, Standard & Poor's.

### Quarterly and Annual Country Performance Snapshot



Source: MSCI

## Rolling One-year Relative Returns (vs. MSCI World ex USA)



## Regional Quarterly Performance

(U.S. Dollar)

MSCI Japan	9.34%
MSCI Pacific ex Japan	8.29%
MSCI World ex USA	3.91%
MSCI ACWI ex USA	3.30%
MSCI Europe	2.49%
MSCI Emerging Markets	0.73%

Source: MSCI

## Style Median and Index Returns\* for Periods ended December 31, 2015

Non-U.S. Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>Non-U.S. Equity Style</b>	<b>4.65</b>	<b>0.62</b>	<b>5.82</b>	<b>4.70</b>	<b>4.24</b>	<b>5.42</b>
MSCI EAFE	4.71	-0.81	5.01	3.60	3.03	3.54
MSCI EAFE (local)	6.34	5.33	12.30	7.85	3.22	2.67
MSCI ACWI ex USA	3.30	-5.25	1.94	1.51	3.38	4.46
MSCI ACWI ex USA Growth	5.04	-0.91	3.90	2.48	4.02	3.96
MSCI ACWI ex USA Value	1.50	-9.59	-0.08	0.49	2.68	4.87
<b>Global Equity</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Global Equity Style</b>	<b>5.34</b>	<b>0.11</b>	<b>10.20</b>	<b>8.13</b>	<b>6.09</b>	<b>5.49</b>
MSCI World	5.50	-0.87	9.63	7.59	4.98	4.04
MSCI World (local)	6.22	2.08	13.04	9.58	4.95	3.60
MSCI ACWI	5.15	-1.84	8.26	6.66	5.31	4.67
<b>Regional Equity</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
MSCI Europe	2.49	-2.84	4.51	3.88	3.36	3.47
MSCI Europe (local)	5.17	4.91	10.10	6.94	3.94	2.56
MSCI Japan	9.34	9.57	10.17	4.38	0.91	2.12
MSCI Japan (local)	9.83	9.93	22.99	12.95	1.10	2.48
MSCI Pacific ex Japan	8.29	-8.47	-1.32	0.87	6.07	8.15
MSCI Pacific ex Japan (local)	5.90	-0.98	6.80	5.38	5.74	6.46
<b>Emerging/Frontier Markets</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Emerging Market Style</b>	<b>1.42</b>	<b>-13.68</b>	<b>-4.91</b>	<b>-3.46</b>	<b>4.79</b>	<b>10.13</b>
MSCI Emerging Markets	0.73	-14.60	-6.42	-4.47	3.95	8.87
MSCI Emerging Markets (local)	1.56	-5.40	1.20	1.27	6.36	10.22
MSCI Frontier Markets	-1.23	-14.46	4.79	0.36	-1.70	—
<b>Non-U.S. Small Cap Equity</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Non-U.S. Small Cap Style</b>	<b>6.53</b>	<b>9.90</b>	<b>11.48</b>	<b>8.05</b>	<b>6.80</b>	<b>9.73</b>
MSCI World ex USA Small Cap	5.82	5.46	7.82	4.39	4.09	7.35
MSCI ACWI ex USA Small Cap	5.28	2.60	5.64	2.63	4.95	8.24
MSCI Emerging Market Small Cap	3.27	-6.85	-1.67	-3.29	6.14	10.86

\*Returns less than one year are not annualized.

Sources: Callan, MSCI.

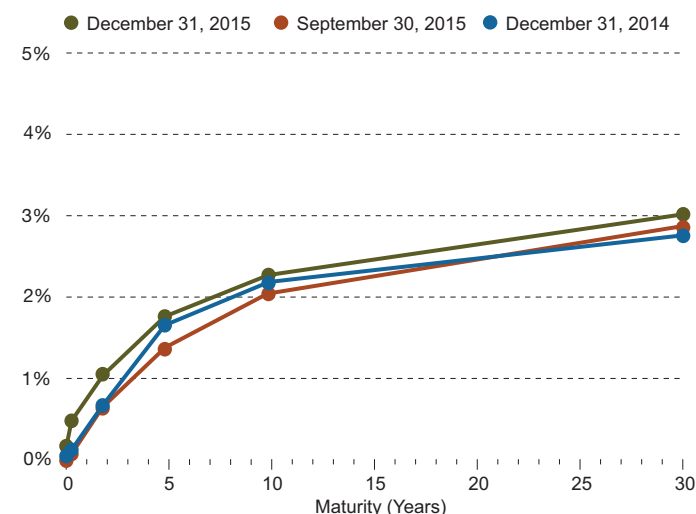
# Take It Easy

U.S. FIXED INCOME | Kevin Nagy

Yields rose in the fourth quarter as the Federal Reserve raised interest rates for the first time in nearly a decade. The yield curve flattened, though the effect on spreads was mixed: investment grade credit and mortgage backed security (MBS) spreads tightened while asset-backed (ABS), commercial MBS, and high yield spreads widened. The **Barclays Aggregate Index** dropped 0.57%.

According to the Fed, the economy showed signs of moderate growth, driven by fixed investment from businesses, household spending, and a strengthening housing sector. So after months of restraint, the Fed raised the federal funds rate band by 0.25% to 0.25%–0.50%. The Fed specifically cited a strong labor market as a key reason behind the decision. The 10-year U.S. Treasury yield increased to 2.27%. The breakeven inflation rate (the difference between nominal and real yields) on 10-year Treasuries increased from 1.43% to 1.58% as TIPS outperformed nominal Treasuries. This measure rebounded from last quarter, when it reached its lowest level since 2008 (1.43%).

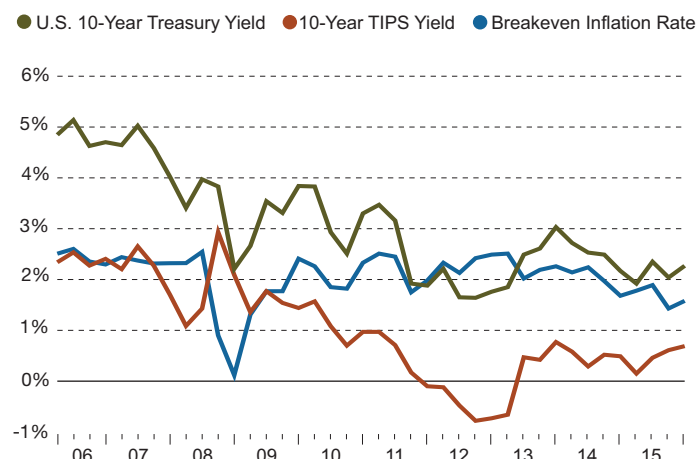
## U.S. Treasury Yield Curves



Source: Bloomberg

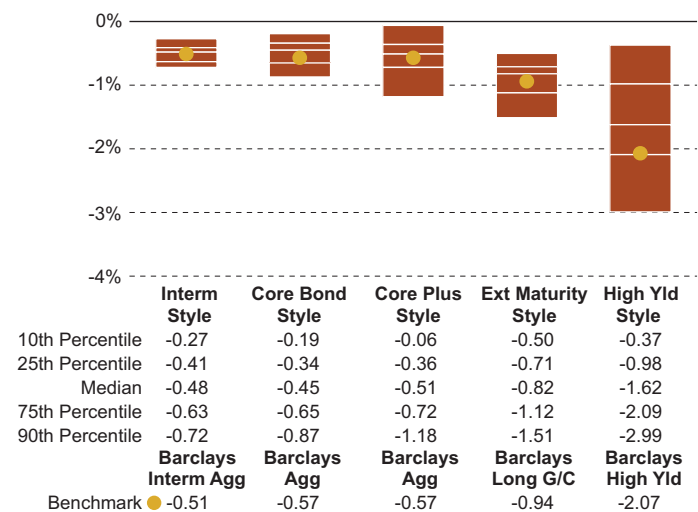
Every sector in the Barclays Aggregate posted negative quarterly returns. Relative to like-duration Treasuries, the strongest performer was U.S. MBS which, although down 0.10%, beat Treasuries by 0.61%. Credit (-0.52%) was the only other sector to outperform Treasuries (+0.50% relative to Treasuries), buoyed by strong performance in the Financials sector (+1.09% relative to Treasuries). Both ABS and U.S. agencies outperformed like-duration Treasuries for the year, despite trailing in the quarter.

## Historical 10-Year Yields



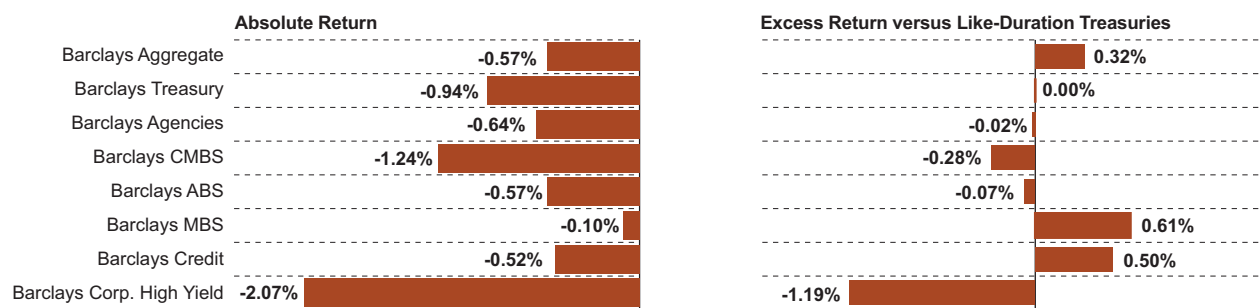
Source: Bloomberg

## Callan Style Group Quarterly Returns



Sources: Barclays, Callan

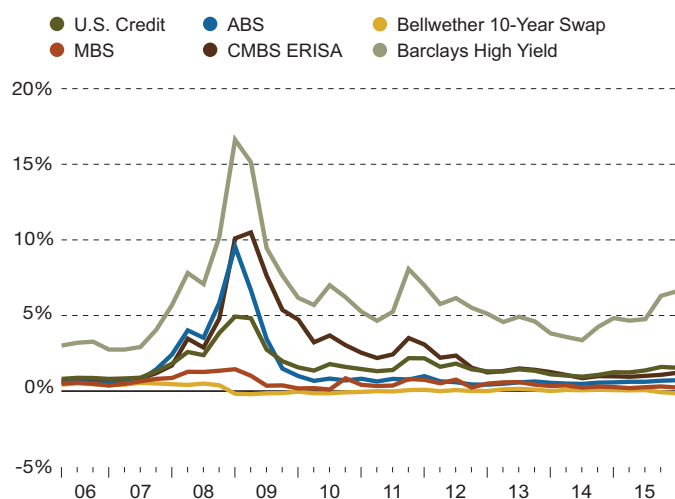
## Fixed Income Index Quarterly Returns



Source: Barclays

High yield corporate bonds slumped as the **Barclays Corporate High Yield Index** ended the quarter down 2.07%. The Index receded 4.47% for the year and underperformed Treasuries by 5.77%. New issuance was \$35.6 billion for the quarter, down from \$42.8 billion. New issue activity for 2015 was \$260.5 billion, 16.3% lower than 2014.

## Effective Yield Over Treasuries



Source: Barclays

## U.S. Fixed Income Index Characteristics as of December 31, 2015

Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity	% of Barclays G/C	% of Barclays Agg
Barclays Aggregate	2.59	5.68	7.94		100.00
Barclays Govt/Credit	2.51	6.22	8.49	100.00	68.90
Intermediate	2.06	3.97	4.31	78.98	54.42
Long-Term	4.19	14.67	24.20	21.02	14.48
Barclays Govt	1.72	5.71	7.02	56.97	39.25
Barclays Credit	3.54	6.90	10.43	43.03	29.65
Barclays MBS	2.77	4.49	6.89		28.64
Barclays ABS	1.88	2.32	2.47		0.56
Barclays CMBS	2.97	4.99	5.62		1.83
Barclays Corp High Yield	8.74	4.34	6.19		

Source: Barclays

## U.S. FIXED INCOME (Continued)

### Callan Style Median and Index Returns\* for Periods ended December 31, 2015

<b>Broad Fixed Income</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Core Bond Style</b>	<b>-0.45</b>	<b>0.82</b>	<b>1.71</b>	<b>3.77</b>	<b>4.96</b>	<b>5.40</b>
<b>Core Bond Plus Style</b>	<b>-0.51</b>	<b>0.20</b>	<b>1.77</b>	<b>4.17</b>	<b>5.36</b>	<b>5.96</b>
Barclays Aggregate	-0.57	0.55	1.44	3.25	4.51	4.97
Barclays Govt/Credit	-0.74	0.15	1.21	3.39	4.47	5.01
Barclays Govt	-0.91	0.86	1.01	2.77	4.10	4.53
Barclays Credit	-0.52	-0.77	1.49	4.38	5.18	5.82
Citi Broad Investment Grade	-0.53	0.53	1.41	3.23	4.60	5.04
<b>Long-Term</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Extended Maturity Style</b>	<b>-0.82</b>	<b>-3.34</b>	<b>2.10</b>	<b>7.42</b>	<b>6.93</b>	<b>7.43</b>
Barclays Long Govt/Credit	-0.94	-3.30	1.70	6.98	6.45	7.07
Barclays Long Govt	-1.38	-1.16	2.55	7.65	6.67	6.97
Barclays Long Credit	-0.66	-4.56	1.23	6.49	6.19	7.28
Citi Pension Discount Curve	0.77	-3.04	2.85	9.28	7.80	9.19
<b>Intermediate-Term</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Intermediate Style</b>	<b>-0.48</b>	<b>1.26</b>	<b>1.32</b>	<b>2.93</b>	<b>4.54</b>	<b>4.94</b>
Barclays Intermediate Aggregate	-0.51	1.21	1.41	2.74	4.26	4.67
Barclays Intermediate Govt/Credit	-0.69	1.07	1.10	2.58	4.04	4.53
Barclays Intermediate Govt	-0.84	1.18	0.81	2.02	3.71	4.07
Barclays Intermediate Credit	-0.45	0.90	1.61	3.63	4.82	5.35
<b>Short-Term</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Defensive Style</b>	<b>-0.24</b>	<b>0.91</b>	<b>0.90</b>	<b>1.45</b>	<b>3.05</b>	<b>3.42</b>
<b>Active Duration Style</b>	<b>-0.42</b>	<b>1.17</b>	<b>1.53</b>	<b>3.28</b>	<b>4.60</b>	<b>5.27</b>
Money Market Funds (net of fees)	0.00	0.01	0.01	0.01	1.17	1.41
ML Treasury 1–3-Year	-0.44	0.54	0.51	0.70	2.42	2.84
90-Day Treasury Bills	0.03	0.05	0.05	0.07	1.24	1.61
<b>High Yield</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>High Yield Style</b>	<b>-1.62</b>	<b>-3.10</b>	<b>2.41</b>	<b>5.47</b>	<b>6.95</b>	<b>7.79</b>
Barclays Corporate High Yield	-2.07	-4.47	1.69	5.04	6.96	7.59
ML High Yield Master	-2.09	-4.55	1.64	4.84	6.74	7.41
<b>Mortgage/Asset-Backed</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Mortgage Style</b>	<b>-0.16</b>	<b>1.72</b>	<b>2.34</b>	<b>3.63</b>	<b>4.96</b>	<b>5.34</b>
Barclays MBS	-0.10	1.51	2.01	2.96	4.64	4.90
Barclays ABS	-0.57	1.25	0.95	2.31	3.29	4.00
Barclays CMBS	-1.24	0.97	1.68	4.09	5.20	5.79
<b>Municipal</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
Barclays Muni	1.50	3.30	3.16	5.35	4.72	5.01
Barclays Muni 1–10-Year	0.79	2.45	2.24	3.56	4.08	4.25
Barclays Muni 3-Year	-0.01	1.18	1.24	1.81	3.01	3.24
<b>TIPS</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
Barclays TIPS Full Duration	-0.64	-1.44	-2.27	2.55	3.93	5.51
Barclays TIPS 1-10 Year	-0.70	-0.52	-1.77	1.64	3.51	4.84

\*Returns for less than one year are not annualized.

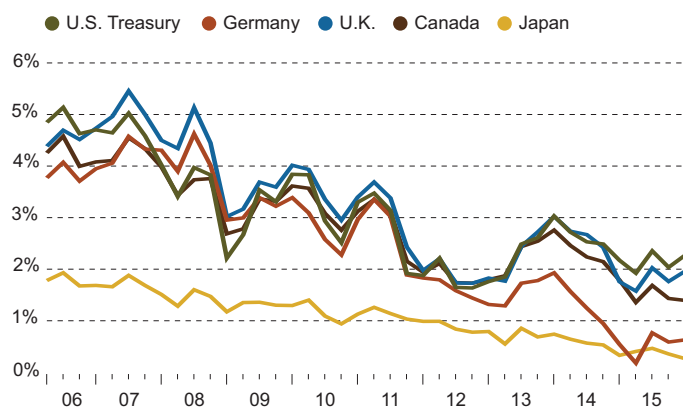
Sources: Barclays, Callan, Citigroup, Merrill Lynch.

# Slip 'n Slide

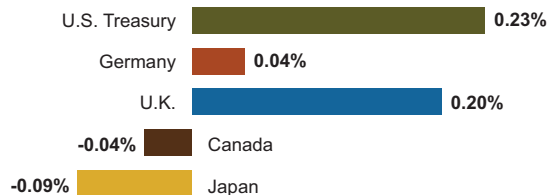
## NON-U.S. FIXED INCOME | Kyle Fekete

The **Citi Non-U.S. World Government Bond Index** declined 1.38% for the quarter and 5.54% for the year. As the U.S. dollar continued to appreciate, the Index's hedged equivalent inched ahead 0.48% for the quarter and 1.52% for the year. The yield on 10-year German bunds was volatile throughout 2015: it started off the year at 0.54%, sank to 0.18% on March 31, climbed to 0.76% on June 30, and eventually ended year at 0.63%. Adding to the noise of 2015, German debt with maturities as far out as seven years provided negative yields, indicating bond investors would have to pay to own before adjusting for inflation. Approximately a third of the debt issued by European governments had negative yields at the end of the year. U.K. sovereigns lagged their European counterparts as the 10-year gilt fell 1.36%, pushing yields higher than the 10-year German bund. The Bank of England continued to battle weak inflation and held interest rates at an all-time low throughout the year.

### 10-Year Global Government Bond Yields



### Change in 10-Year Yields from 3Q15 to 4Q15



Source: Bloomberg

The Japanese 10-year bond yield declined to 0.27%, the lowest since January. The country dodged a recession as GDP growth was revised upwards to 1% through September; the original calculation had it contracting by 0.8%.

In December, the ECB lowered its deposit rate to -0.3% and extended its quantitative easing program out to March 2017. Propelled by the ECB's monetary policy and investors' hunt for yield, European periphery countries outperformed their core-eurozone counterparts. Italian and Spanish 10-year bonds earned 1.82% and 1.43%, respectively. Both countries continued their recovery from record-long recessions as unemployment dropped to a three-year low.

### Quarterly Return Attribution for Non-U.S. Gov't Indices (U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	3.05%	-0.53%	3.60%	2.14%
Austria	-2.86%	-0.18%	-2.68%	1.83%
Belgium	-3.13%	-0.45%	-2.68%	2.98%
Canada	-2.79%	0.72%	-3.48%	2.35%
Denmark	-3.26%	-0.56%	-2.72%	0.72%
Finland	-2.70%	-0.02%	-2.68%	0.72%
France	-2.69%	-0.01%	-2.68%	11.25%
Germany	-3.03%	-0.35%	-2.68%	8.80%
Ireland	-2.09%	0.61%	-2.68%	0.93%
Italy	-1.07%	1.66%	-2.68%	11.43%
Japan	0.74%	1.18%	-0.44%	33.36%
Malaysia	4.27%	1.84%	2.38%	0.54%
Mexico	-0.89%	1.00%	-1.88%	1.14%
Netherlands	-2.77%	-0.09%	-2.68%	2.96%
Norway	-3.58%	0.05%	-3.63%	0.33%
Poland	-3.09%	0.64%	-3.71%	0.66%
Singapore	0.66%	0.43%	0.23%	0.42%
South Africa	-16.79%	-6.75%	-10.77%	0.48%
Spain	-1.48%	1.24%	-2.68%	6.41%
Sweden	-2.08%	-1.57%	-0.52%	0.57%
Switzerland	-2.75%	-0.37%	-2.39%	0.35%
U.K.	-3.99%	-1.33%	-2.70%	9.63%

Source: Citigroup

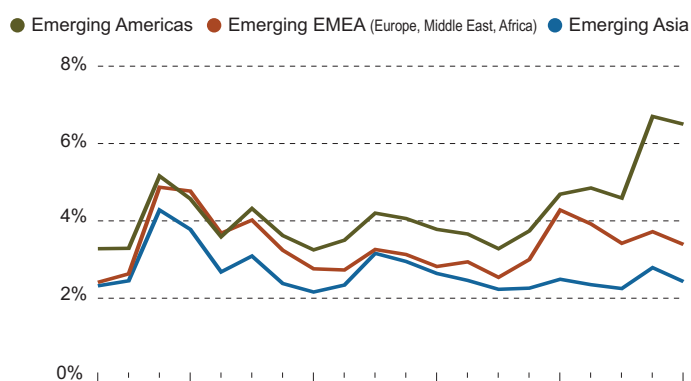
## NON-U.S. FIXED INCOME (Continued)

Emerging markets were mired by political and economic strife. The dollar-denominated **JPM EMBI Global Diversified Index** gained 1.25%, outperforming emerging local currency-denominated sovereign debt. The negative currency effect pulled the **JPM GBI-EM Global Diversified Index** down (-0.01%).

The South African 10-year bond declined 7.26% (on a dollar-denominated basis) over worries that the country's political and economic turmoil could result in a downgrade to junk status. Investors responded harshly after President Jacob Zuma fired Finance Minister Nhlanhla Nene and hired an unknown

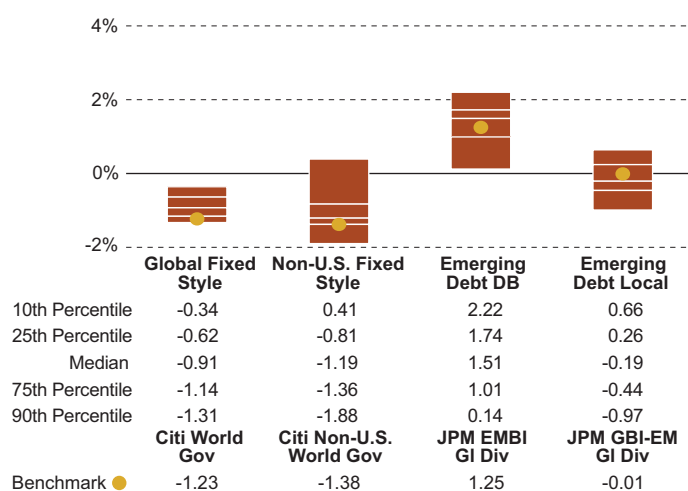
candidate for the job. Additionally, the rand's exchange rate dropped to record lows against major currencies. The local currency-denominated South African 10-year bond plummeted 28.22% in 2015. Brazilian debt declined 30.69% in 2015 on a local currency basis, in the midst of a corruption scandal and President Rousseff's possible impeachment. Brazil remains in a steep recession after being cut to below investment grade by Standard & Poor's earlier in the year.

### Emerging Spreads Over Developed (By Region)



Source: Barclays

### Callan Style Group Quarterly Returns



Sources: Callan, Citigroup, JPMorgan Chase

### Callan Style Median and Index Returns\* for Periods ended December 31, 2015

Global Fixed Income	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>Global Style</b>	<b>-0.91</b>	<b>-3.31</b>	<b>-1.75</b>	<b>1.29</b>	<b>4.29</b>	<b>5.34</b>
Citi World Govt	-1.23	-3.57	-2.70	-0.08	3.44	4.59
Citi World Govt (Local)	0.01	1.28	3.25	3.98	3.74	4.09
Barclays Global Aggregate	-0.92	-3.15	-1.74	0.90	3.74	4.75
Non-U.S. Fixed	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>Non-U.S. Style</b>	<b>-1.19</b>	<b>-5.89</b>	<b>-3.85</b>	<b>-0.12</b>	<b>3.67</b>	<b>5.27</b>
Citi Non-U.S. World Govt	-1.38	-5.54	-4.27	-1.30	3.05	4.43
Citi Non-U.S. World Govt (Local)	0.48	1.52	4.20	4.49	3.72	4.01
European Fixed	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Citi Euro Govt Bond	-2.23	-8.74	-1.05	1.73	3.77	6.28
Citi Euro Govt Bond (Local)	0.47	1.65	4.92	5.73	4.44	5.13
Emerging Markets Fixed	Quarter	Year	3 Years	5 Years	10 Years	15 Years
JPM EMBI Global Diversified	1.25	1.18	0.99	5.36	6.86	8.99
JPM GBI-EM Global Diversified	-0.01	-14.92	-9.95	-3.48	4.31	—

\*Returns less than one year are not annualized.

Sources: Callan, Citigroup, JPMorgan Chase.

# A Straight but Bumpy Road

REAL ESTATE | Mike Pritts

The **NCREIF Property Index** advanced 2.91%, recording a 1.20% income return and a 1.72% appreciation return during the quarter. The NCREIF Property Index cash-flow return appreciated 0.64% for the quarter and 3.10% for the trailing four quarters. There were 210 asset trades, representing \$11.3 billion of overall transactional volume, comfortably ahead of the \$5.1 billion 10-year quarterly transaction average and the prior peak of \$8.7 billion in the second quarter of 2007.

Pricing remained stable as equal-weighted transactional capitalization rates decreased to 5.90%, a slight retreat from the 2015 high (+5.91%) during the third quarter. Over the course of the prior cycle, quarterly equal-weighted transactional capitalization rates dipped to a low of 5.46% in the fourth quarter of 2007 and expanded to a peak of 8.46% in the third quarter of 2009. During the fourth quarter of 2015, appraisal capitalization rates decreased from 4.67% to 4.58%. As markets peaked over the prior cycle, appraisal capitalization rates declined to a low of 4.89% in the third quarter of 2008.

The **NCREIF Open End Diversified Core Equity Index** notched a 3.11% total return, comprising a 1.14% income return and a 2.20% appreciation return. In the listed real estate market, the **FTSE EPRA/NAREIT Developed REIT Index (USD)** gained 4.40% and U.S. REITs tracked by the **FTSE NAREIT Equity REITs Index** advanced an impressive 7.26%.

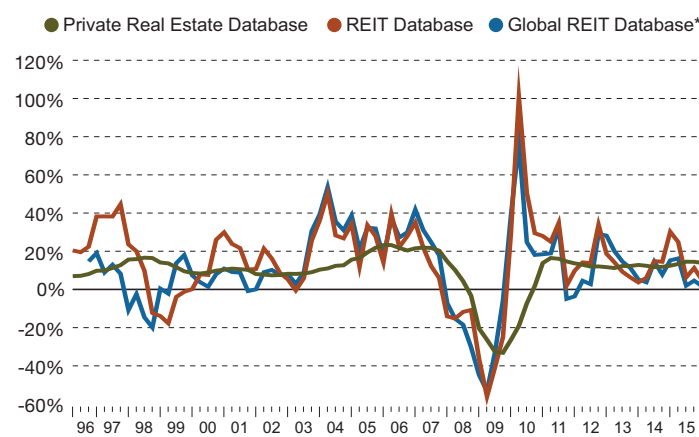
In the U.S., volatility continued as REIT sectors rebounded sharply. Positive sector performance was led by Self-Storage (+16.76%), followed by Industrial (+8.69%), Residential (+8.38%), Retail (+8.10%), Malls (+6.77%), and Health Care (+2.61%). The only negative was Lodging (-2.27%). For the year, Residential was the best performer of the primary real estate sectors (+10.22%), while Lodging lagged (-18.09%). U.S. REITs raised \$10.2 billion following the completion of 14 unsecured-debt offerings raising \$6.9 billion, 14 secondary offerings

raising \$3.1 billion, and two preferred-equity offerings raising \$117 million. There was one U.S. REIT IPO during the quarter. Public equity financing slightly increased from the third quarter's five-year low, but remained a challenge.

During 2015, MSCI and S&P Dow Jones announced that in August 2016, they will begin to break out real estate into a distinct sector rather than continuing to include it in the broader group of Financials. There are currently twenty-five companies included in the S&P 500 Index that will now be included in the new real estate sector. While most commercial real estate in the U.S. is traded in the private markets, this change indicates the increasing importance of publicly listed real estate.

In European core markets, pricing appears undeterred by volatility. Capital-raising remains robust and has consolidated. Several large, commingled vehicles are currently in the market with new funds. According to a survey produced by INREV, many (65%) European investors expect to increase their allocation to real estate over the next two years.

## Rolling One-Year Returns



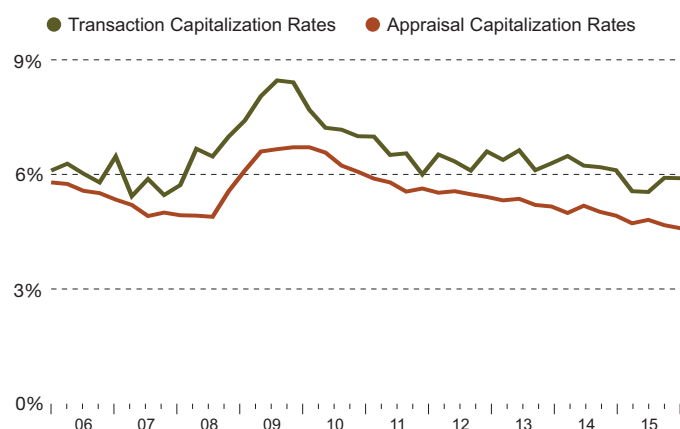
\*Global REIT returns from 3Q96  
Source: Callan

## REAL ESTATE (Continued)

Asian Real Estate funds continue to raise capital despite a slowing Chinese GDP and record capital outflows in the stock market and pressure on the renminbi. The big question in early 2016 is whether continued market uncertainty in the Chinese economy will affect commercial property valuations in other parts of Asia and the world.

CMBS issuance reached \$23.4 billion, remaining steady since the third quarter and slightly down year-over-year (\$25.2 billion). Total issuance for the trailing-12 months was \$101.0 billion, a reduction from its second-quarter peak.

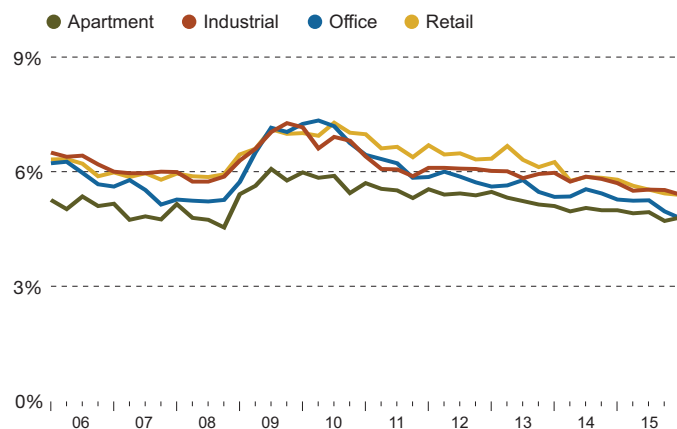
### NCREIF Transaction and Appraisal Capitalization Rates



Source: NCREIF

Note: Transaction capitalization rate is equal-weighted.

### NCREIF Capitalization Rates by Property Type



Source: NCREIF

Note: Capitalization rates are appraisal-based.

### Callan Database Median and Index Returns\* for Periods ended December 31, 2015

Private Real Estate	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>Real Estate Database (net of fees)</b>	<b>2.90</b>	<b>12.90</b>	<b>12.97</b>	<b>12.60</b>	<b>5.47</b>	<b>7.90</b>
NCREIF Property	2.91	13.33	12.04	12.18	7.76	8.96
NFI-ODCE (value wtd. net)	3.11	13.95	12.77	12.60	5.55	6.94
Public Real Estate	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>REIT Database</b>	<b>7.50</b>	<b>4.48</b>	<b>12.03</b>	<b>12.89</b>	<b>8.32</b>	<b>12.13</b>
FTSE NAREIT Equity	7.26	3.20	11.23	11.96	7.41	11.16
Global Real Estate	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>Global REIT Database</b>	<b>4.38</b>	<b>1.03</b>	<b>7.61</b>	<b>8.95</b>	<b>6.15</b>	<b>-</b>
FTSE EPRA/NAREIT Developed REIT	4.40	0.05	6.59	7.97	5.39	9.20

\*Returns for less than one year are not annualized.

All REIT returns are reported gross in USD.

Sources: Callan, NAREIT, NCREIF, The FTSE Group. NCREIF statistics are the product of direct queries and may fluctuate over time.

# Level at 35,000 Feet

PRIVATE EQUITY | Gary Robertson

In fundraising, *Private Equity Analyst* reports that 2015's fund-raising total of \$257 billion is a modest decline from 2014 (-3.6% or \$10.5 billion). The number of funds formed declined by 83 (-10.8%) to 682 in 2015. The fourth quarter's new commitments totaled \$59.7 billion with 125 new partnerships formed. While the dollar volume increased by 11% compared to the prior quarter's \$53.7 billion, the number of funds formed fell by 20% from the third quarter's 179. The year's final quarter was surprisingly weak, likely due to the onset of public equity market volatility in mid-August.

According to *Buyouts* newsletter, announced and closed new-company acquisitions totaled 1,911 in 2015, up 4% from 1,836 in 2014. Announced and closed dollar volume was \$303.7 billion, up 47% from \$206.8 billion in 2014. The quarter generated 365 announced and closed transactions, down from 548. Disclosed dollar volume totaled \$77.2 billion, up from \$66.7 billion. According to S&P Capital IQ, in the second half of the year average purchase price multiples remained just over 10x EBITDA.

According to the National Venture Capital Association, the \$58.8 billion of new investment in venture capital companies is a 16% jump for the year, up from \$50.8 billion. The dollar volume in 2015 is the second highest year on record, although significantly shy of first place: \$105.0 billion in 2000. The year produced 4,380 rounds of investment, slightly down from last year's 4,441. Quarterly investment volume totaled \$11.3 billion in 962 rounds of financing, down from \$16.6 billion in 1,149 rounds.

## Private Equity Performance Database (%)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	6.8	26.8	21.0	18.7	11.4	4.0	27.1
Growth Equity	5.0	11.0	15.3	14.6	12.7	9.9	14.9
All Buyouts	5.3	7.7	15.7	15.4	12.5	11.3	13.2
Mezzanine	3.6	8.5	11.3	11.8	10.7	7.8	10.0
Distressed	1.6	4.2	13.3	12.2	10.4	11.1	11.2
<b>All Private Equity</b>	<b>5.1</b>	<b>10.7</b>	<b>16.1</b>	<b>15.4</b>	<b>12.1</b>	<b>9.2</b>	<b>14.4</b>
S&P 500 Index	0.3	7.4	17.3	17.3	7.9	4.4	8.9

Private equity returns are net of fees.

Sources: Standard & Poor's, Thomson/Cambridge.

\*Most recent data available at time of publication.

## Funds Closed January 1 to December 31, 2015

Strategy	No. of Funds	Amt (\$mm)	Percent
Venture Capital	281	34,274	13%
Buyouts	263	169,694	66%
Subordinated Debt	28	12,535	5%
Distressed Debt	37	22,573	9%
Secondary and Other	15	6,637	3%
Fund-of-funds	58	10,961	4%
<b>Totals</b>	<b>682</b>	<b>256,673</b>	<b>100%</b>

Source: Private Equity Analyst

Regarding exits, *Buyouts* reports that 2015's aggregate disclosed M&A exit values of \$127.4 billion is up 13% from 2014's \$111.5 billion. The 513 private M&A exits of buyout-backed companies is down 35% from the 690 in 2014. Seven of the completed 99 M&A exits had values over \$1 billion, with the largest being Silver Lake's \$5.3 billion sale of Interactive Data Corp. to Intercontinental Exchange. There were only four buyout-backed IPOs, with a total value of \$774.4 million. The full year produced 31 IPOs, raising a total of \$9.1 billion.

Venture-backed M&A exits for the year total 372 with 84 announced values totaling \$16.2 billion, down from 385 exits and \$48.1 billion in announced value last year. The quarter had 91 exits with 26 announced values totaling \$3.6 billion. The total number of M&A deals and announced value both declined from the third quarter's 109 exits totaling \$6.9 billion. The year produced 77 venture-backed IPOs raising \$9.4 billion; for the quarter, there were 16 raising \$2.2 billion. The number and total float was up versus the third quarter's 15 IPOs raising \$1.9 billion.

(Pooled Horizon IRRs through June 30, 2015\*)

# Under Pressure

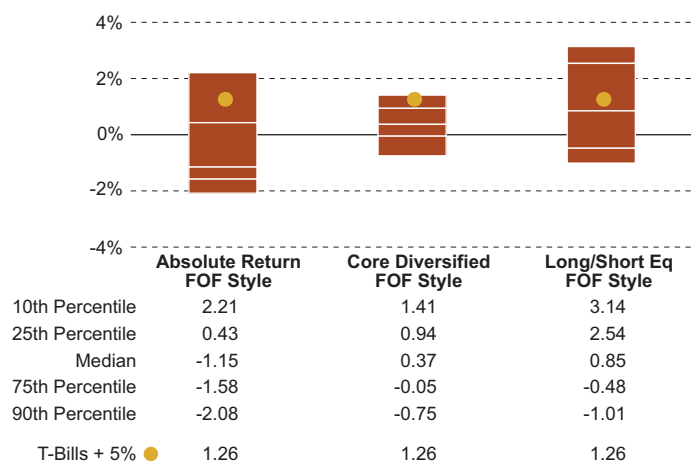
## HEDGE FUNDS | Jim McKee

Growing unease with economic change is evident in the capital markets. Commodity prices slid further, led by oil, as China struggled with its centrally planned shift to a consumer-driven economy. Strong employment gains and record auto sales in the U.S. bolstered the Federal Reserve's confidence to raise short-term rates for the first time in almost a decade. Despite rebounding equities in developed markets, credit spreads widened, particularly among lower-rated bonds in the commodity sector.

As a proxy for hedge funds without implementation costs, the **Credit Suisse Hedge Fund Index (CS HFI)** slipped 0.12% in the fourth quarter. By contrast, the median manager in the **Callan Hedge Fund-of-Funds Database** edged ahead 0.40%, net of all fees.

Within the CS HFI, the major sector winner was *Long/Short Equity* (+1.58%). *Event-Driven Multi-Strategy* (-2.55%), which is typically more focused on soft catalysts, fell particularly hard as investors fled crowded trades in this space. *Distressed* (-1.76%) also lost ground with credit spreads widening, but outpaced the **Barclays High Yield Credit Index** (-2.07%).

## Callan Style Group Quarterly Returns



Sources: Callan, Merrill Lynch

Within Callan's Hedge Fund-of-Funds Database, market exposures marginally affected performance. Aided by the U.S. equity market rally, the median *Callan Long/Short Equity FOF* (+0.85%) outpaced the *Callan Absolute Return FOF* (-1.15%). With diversifying exposures to both non-directional and directional styles, the *Core Diversified FOF* modestly gained 0.37%.

## Callan Database Median and Index Returns\* for Periods ended December 31, 2015

	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
<b>Hedge Fund-of-Funds Database</b>	<b>0.40</b>	<b>-0.09</b>	<b>4.72</b>	<b>3.54</b>	<b>3.96</b>	<b>5.28</b>
CS Hedge Fund Index	-0.12	-0.71	4.30	3.55	4.97	5.95
CS Equity Market Neutral	-0.04	1.69	3.16	2.96	-1.44	1.39
CS Convertible Arbitrage	-0.58	0.81	1.67	2.76	4.42	4.94
CS Fixed Income Arbitrage	0.03	0.59	2.90	4.84	3.84	4.50
CS Multi-Strategy	0.51	3.84	7.01	6.77	6.17	6.89
CS Distressed	-1.76	-5.30	4.05	3.81	4.82	7.80
CS Risk Arbitrage	0.81	0.41	1.30	1.50	3.55	3.65
CS Event-Driven Multi-Strategy	-2.55	-6.67	2.86	1.08	5.12	6.45
CS Long/Short Equity	1.58	3.56	8.77	5.23	5.80	5.98
CS Dedicated Short Bias	-4.29	2.38	-10.15	-9.72	-8.90	-7.19
CS Global Macro	0.62	0.17	2.52	3.70	6.79	9.04
CS Managed Futures	-1.05	-0.93	4.54	1.22	4.21	5.40
CS Emerging Markets	2.79	-0.22	3.30	2.55	5.17	8.06

\*Returns less than one year are not annualized. Sources: Callan, Credit Suisse.

# Chasing the Market

## DEFINED CONTRIBUTION | Tom Szkwarla

The Callan DC Index™ declined 5.82% in the third quarter of 2015, reflecting widespread losses in global equity markets.

According to the Callan DC Index, the typical defined contribution (DC) plan trailed defined benefit (DB) plans by 1.83% in the third quarter of 2015. This is primarily because DC plans have little exposure to longer-term fixed income. Meanwhile, the average 2035 target date fund fared even worse—declining 7.34%—reflecting its higher allocation to equities (78% average allocation).

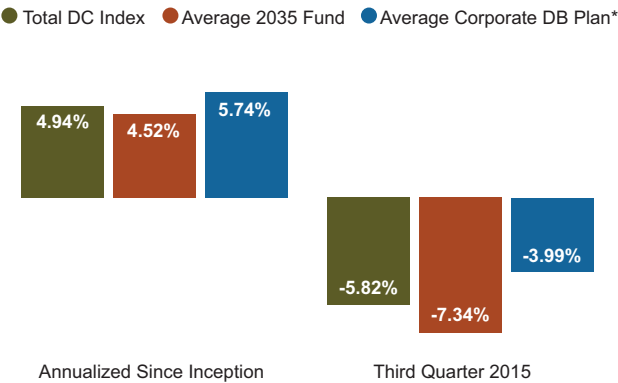
Driven almost entirely by investment losses, DC plan balances shrank by 5.97% in the third quarter. However, annualized total growth since inception remains steady at a respectable 7.33%. In the long term, participant contributions (net flows) added 2.39% annually, while market appreciation (return growth) contributed the remaining 4.94%.

Almost three-fourths of the asset classes in the DC Index experienced net outflows in the third quarter. Predictably, target date funds were among the only asset class to attract inflows. Despite weak performance, about 60 cents of every dollar that moved within DC plans ended up in target date funds.

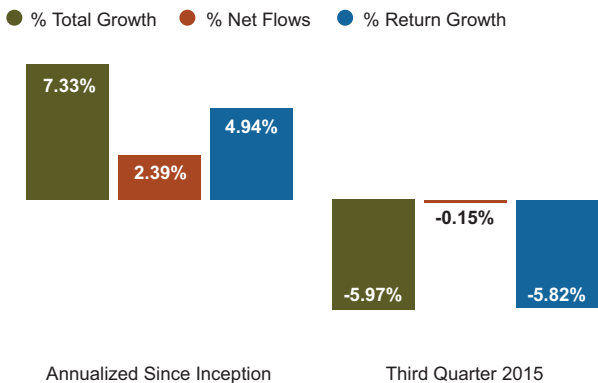
For the first time in two years, stable value experienced net inflows. Conversely, U.S. large cap and company stock saw significant outflows for the second consecutive quarter. Third-quarter turnover activity (i.e., net transfer activity levels) within DC plans came in at 0.38%, which is slightly higher than the second quarter (0.32%) but still well below the historical average of 0.65%.

*The Callan DC Index is an equally weighted index tracking the cash flows and performance of nearly 90 plans, representing more than one million DC participants and over \$135 billion in assets. The Index is updated quarterly and is available on Callan's website, as is the quarterly DC Observer newsletter.*

### Investment Performance\*



### Growth Sources\*



### Net Cash Flow Analysis (Third Quarter 2015)\* (Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	60.70%
Stable Value	22.06%
U.S. Small/Mid Cap	-18.45%
U.S. Large Cap	-42.20%
Total Turnover**	0.38%

Source: Callan DC Index  
Data provided here is the most recent available at time of publication.

\* DC Index inception date is January 2006. DB plan performance is gross of fees.

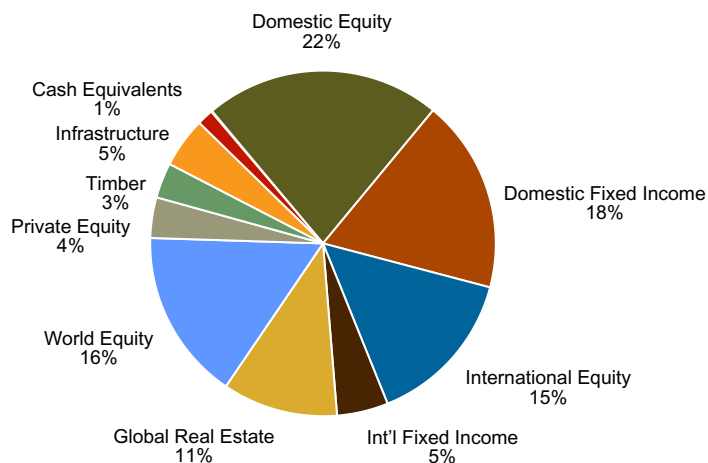
\*\*Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.



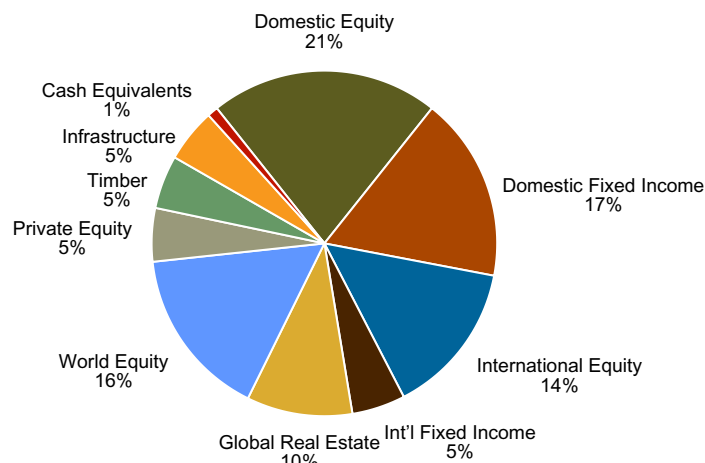
## Actual vs Target Asset Allocation As of December 31, 2015

The top left chart shows the Fund's asset allocation as of December 31, 2015. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Public Fund Sponsor Database.

**Actual Asset Allocation**

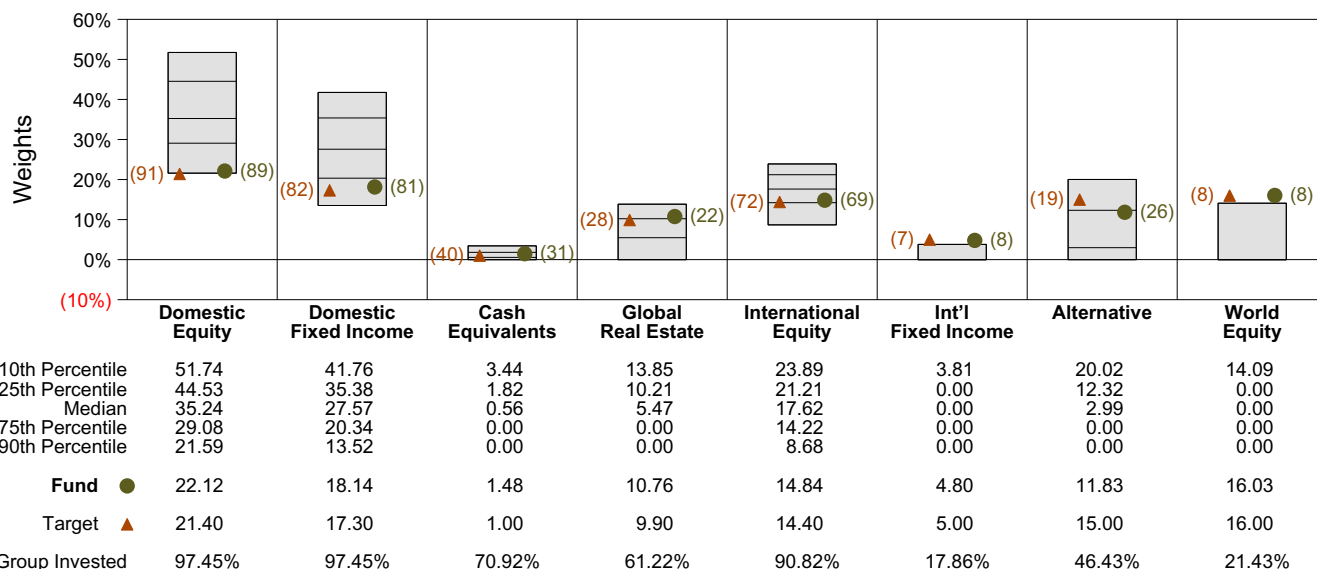


**Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	1,014,213	22.1%	21.4%	0.7%	33,113
Domestic Fixed Income	831,760	18.1%	17.3%	0.8%	38,627
International Equity	680,198	14.8%	14.4%	0.4%	20,018
Int'l Fixed Income	220,253	4.8%	5.0%	(0.2%)	(8,976)
Global Real Estate	493,077	10.8%	9.9%	0.9%	39,204
World Equity	734,984	16.0%	16.0%	0.0%	1,451
Private Equity	175,494	3.8%	5.0%	(1.2%)	(53,735)
Timber	150,949	3.3%	5.0%	(1.7%)	(78,280)
Infrastructure	215,738	4.7%	5.0%	(0.3%)	(13,491)
Cash Equivalents	67,915	1.5%	1.0%	0.5%	22,069
Total	4,584,582	100.0%	100.0%		

### Asset Class Weights vs Public Fund Sponsor Database

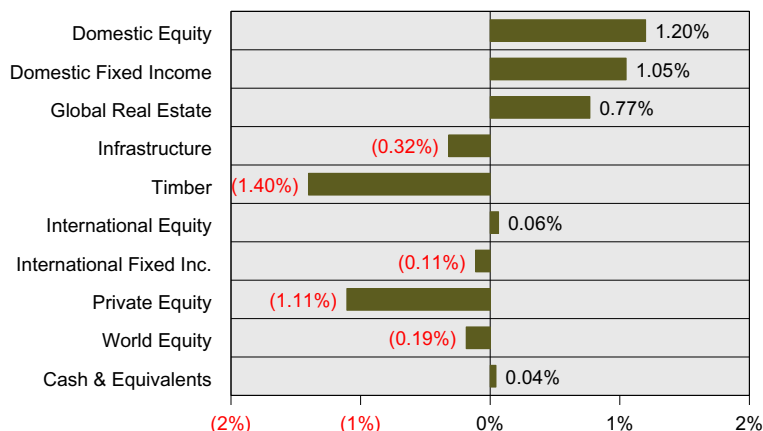


\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

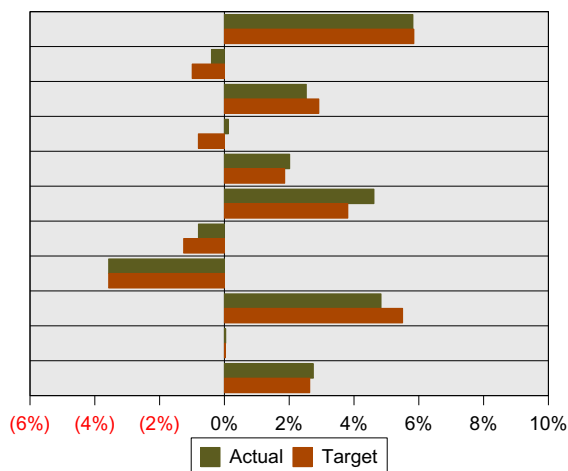
## Quarterly Total Fund Relative Attribution - December 31, 2015

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

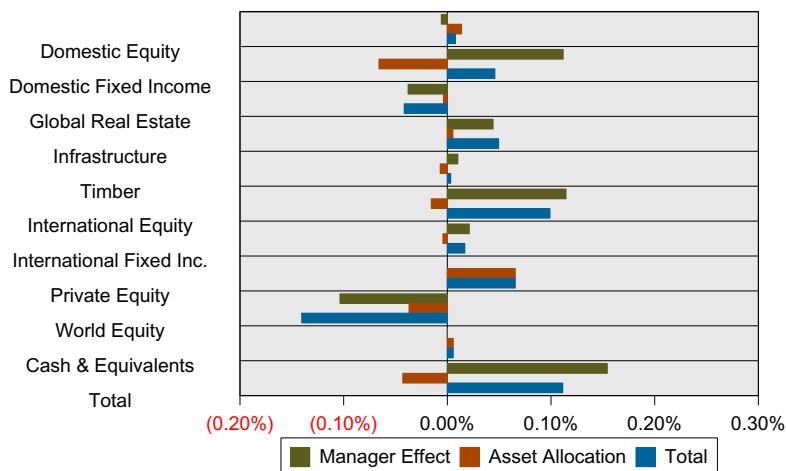
### Asset Class Under or Overweighting



### Actual vs Target Returns



### Relative Attribution by Asset Class



### Relative Attribution Effects for Quarter ended December 31, 2015

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	5.82%	5.85%	(0.01%)	0.01%	0.01%
Domestic Fixed Income	19%	18%	(0.40%)	(0.99%)	0.11%	(0.07%)	0.05%
Global Real Estate	11%	10%	2.53%	2.91%	(0.04%)	(0.00%)	(0.04%)
Infrastructure	5%	5%	0.13%	(0.80%)	0.04%	0.01%	0.05%
Timber	4%	5%	2.02%	1.86%	0.01%	(0.01%)	0.00%
International Equity	14%	14%	4.62%	3.81%	0.11%	(0.02%)	0.10%
International Fixed Inc.	5%	5%	(0.80%)	(1.26%)	0.02%	(0.00%)	0.02%
Private Equity	4%	5%	(3.57%)	(3.57%)	0.00%	0.07%	0.07%
World Equity	16%	16%	4.83%	5.50%	(0.10%)	(0.04%)	(0.14%)
Cash & Equivalents	1%	1%	0.04%	0.03%	0.00%	0.01%	0.01%

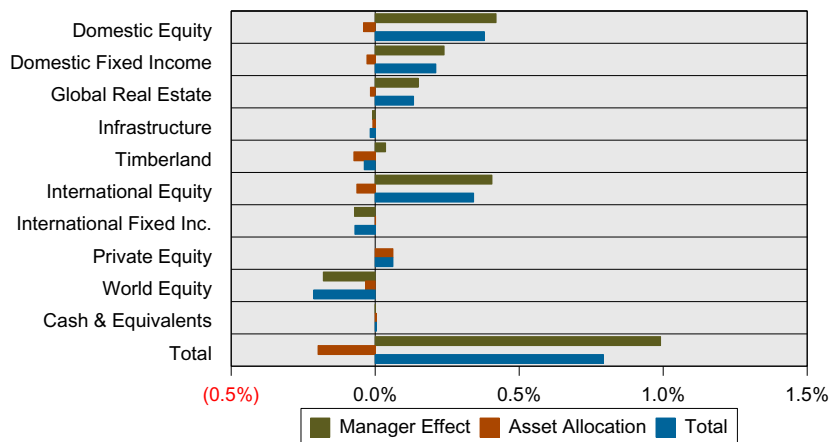
**Total** **2.75% = 2.63% + 0.15% + (0.04%)** **0.11%**

\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

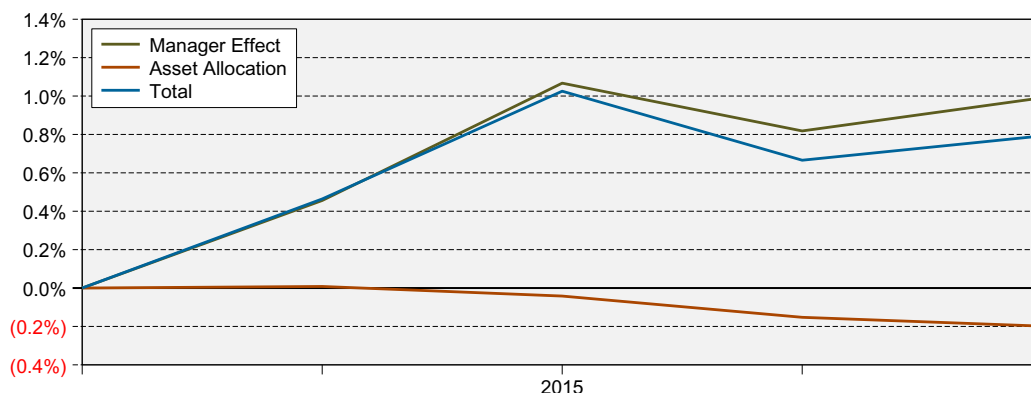
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

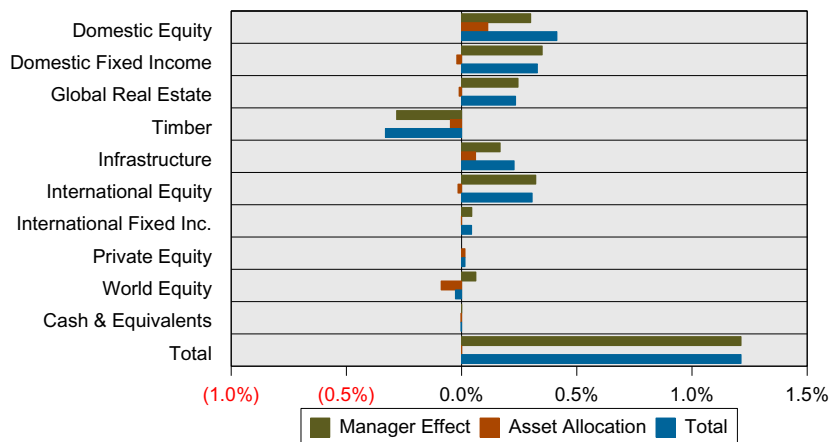
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	1.59%	(0.27%)	0.42%	(0.04%)	0.38%
Domestic Fixed Income	19%	18%	0.48%	(0.80%)	0.24%	(0.03%)	0.21%
Global Real Estate	10%	10%	15.12%	13.33%	0.15%	(0.02%)	0.13%
Infrastructure	4%	5%	(0.01%)	0.38%	(0.01%)	(0.01%)	(0.02%)
Timberland	4%	5%	5.68%	4.97%	0.04%	(0.07%)	(0.04%)
International Equity	14%	14%	(1.24%)	(3.99%)	0.41%	(0.06%)	0.34%
International Fixed Inc.	5%	5%	(7.24%)	(6.02%)	(0.07%)	0.00%	(0.07%)
Private Equity	4%	5%	(8.24%)	(8.24%)	0.00%	0.06%	0.06%
World Equity	16%	16%	(2.00%)	(0.87%)	(0.18%)	(0.03%)	(0.21%)
Cash & Equivalents	1%	1%	0.10%	0.05%	0.00%	0.00%	0.00%
<b>Total</b>			<b>0.88%</b>	<b>0.09%</b>	<b>0.99%</b>	<b>(0.20%)</b>	<b>0.79%</b>

\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

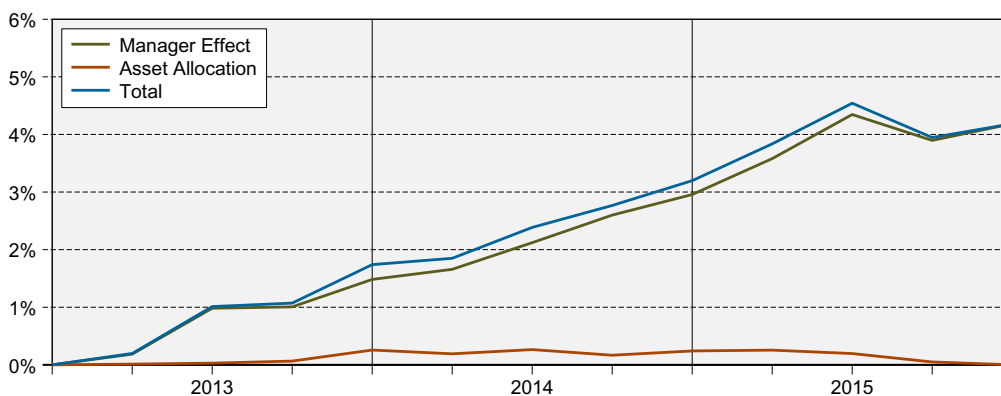
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Three Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Three Year Annualized Relative Attribution Effects

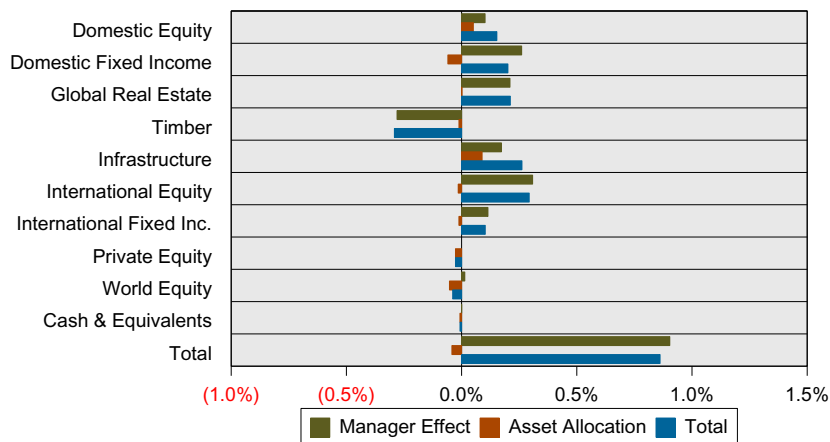
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	15.73%	14.30%	0.30%	0.11%	0.41%
Domestic Fixed Income	19%	18%	3.34%	1.54%	0.35%	(0.02%)	0.33%
Global Real Estate	9%	10%	14.84%	12.04%	0.25%	(0.01%)	0.23%
Timber	4%	5%	2.13%	8.35%	(0.28%)	(0.05%)	(0.33%)
Infrastructure	4%	5%	4.94%	0.72%	0.17%	0.06%	0.23%
International Equity	15%	14%	4.63%	2.40%	0.32%	(0.02%)	0.31%
International Fixed Inc.	5%	5%	(3.27%)	(4.07%)	0.04%	(0.00%)	0.04%
Private Equity	4%	5%	(0.21%)	(0.21%)	0.00%	0.01%	0.01%
World Equity	16%	16%	9.83%	9.63%	0.06%	(0.09%)	(0.03%)
Cash & Equivalents	1%	1%	0.07%	0.05%	0.00%	(0.00%)	(0.00%)
<b>Total</b>			<b>7.86%</b>	<b>6.65%</b>	<b>1.21%</b>	<b>0.00%</b>	<b>1.21%</b>

\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

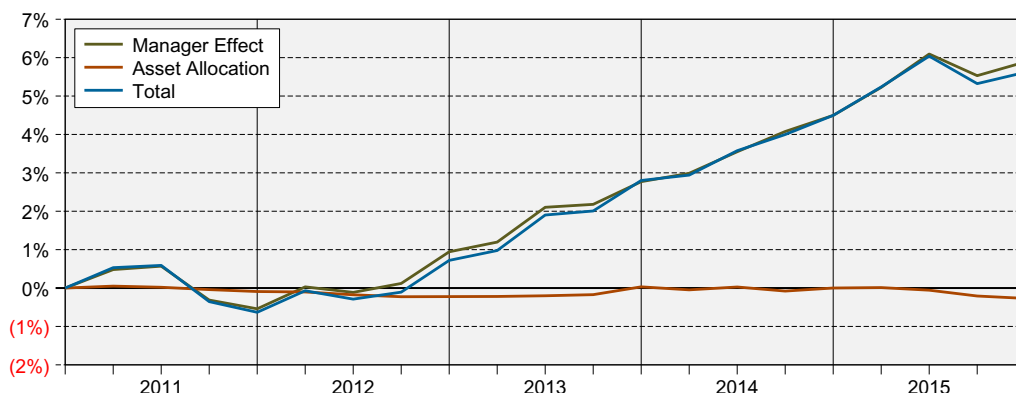
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Five Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Five Year Annualized Relative Attribution Effects

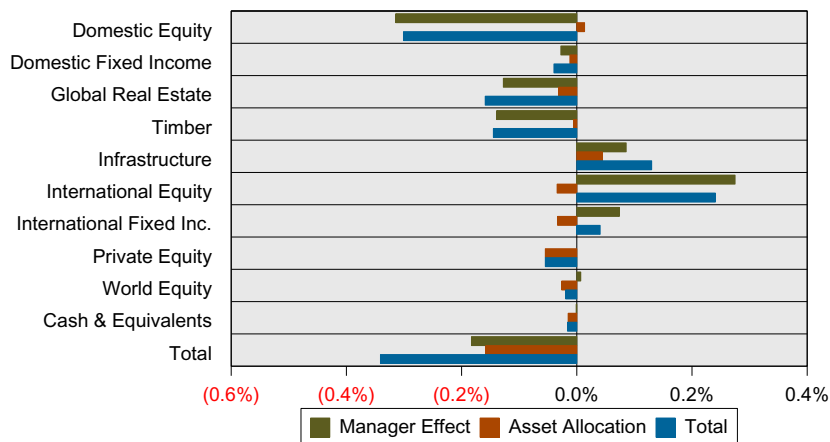
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	27%	26%	12.48%	11.81%	0.10%	0.05%	0.15%
Domestic Fixed Income	20%	19%	5.44%	3.81%	0.26%	(0.06%)	0.20%
Global Real Estate	9%	9%	14.82%	12.18%	0.21%	0.00%	0.21%
Timber	4%	4%	-	-	(0.28%)	(0.01%)	(0.29%)
Infrastructure	3%	4%	-	-	0.17%	0.09%	0.26%
International Equity	16%	16%	3.48%	1.55%	0.31%	(0.01%)	0.29%
International Fixed Inc.	5%	5%	1.24%	(0.83%)	0.11%	(0.01%)	0.10%
Private Equity	5%	5%	2.54%	2.54%	0.00%	(0.03%)	(0.03%)
World Equity	11%	11%	-	-	0.01%	(0.05%)	(0.04%)
Cash & Equivalents	1%	1%	0.09%	0.07%	0.00%	(0.01%)	(0.01%)
<b>Total</b>			<b>7.29%</b>	<b>6.43%</b>	<b>0.90%</b>	<b>(0.04%)</b>	<b>0.86%</b>

\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

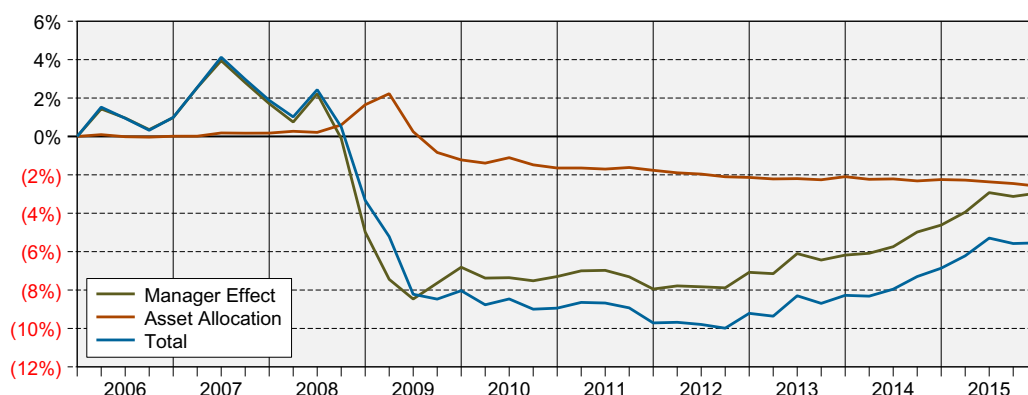
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Ten Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Ten Year Annualized Relative Attribution Effects

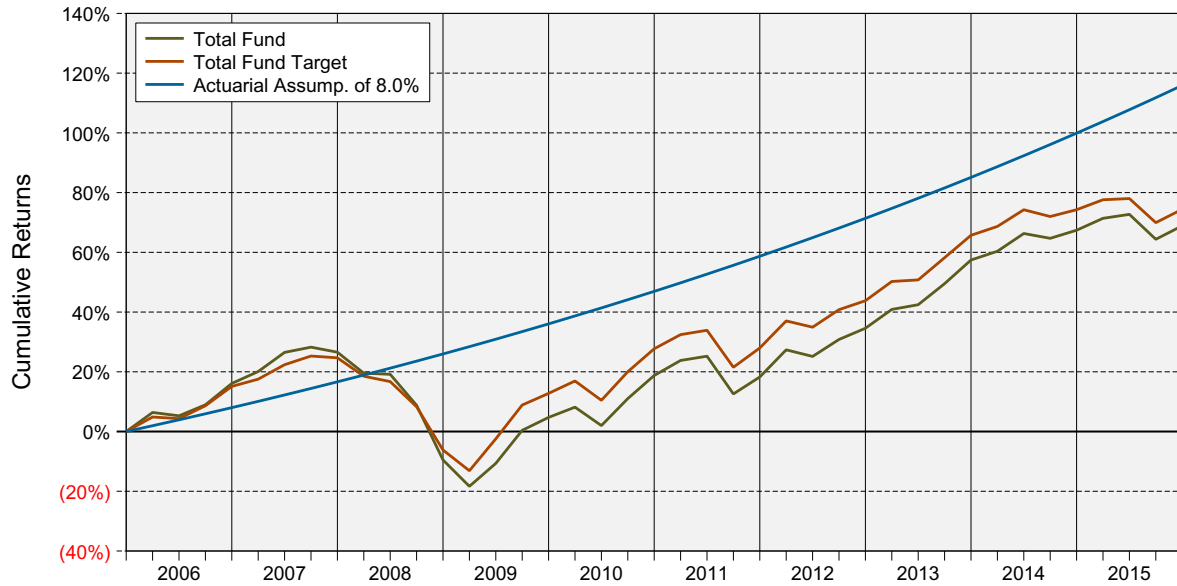
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	32%	32%	6.39%	7.27%	(0.31%)	0.01%	(0.30%)
Domestic Fixed Income	23%	22%	5.83%	5.29%	(0.03%)	(0.01%)	(0.04%)
Global Real Estate	9%	8%	6.29%	7.76%	(0.13%)	(0.03%)	(0.16%)
Timber	2%	2%	-	-	(0.14%)	(0.01%)	(0.14%)
Infrastructure	2%	2%	-	-	0.09%	0.04%	0.13%
International Equity	17%	17%	4.73%	3.15%	0.27%	(0.03%)	0.24%
International Fixed Inc.	5%	5%	4.61%	3.26%	0.07%	(0.03%)	0.04%
Private Equity	4%	5%	2.05%	2.05%	0.00%	(0.05%)	(0.05%)
World Equity	5%	5%	-	-	0.01%	(0.03%)	(0.02%)
Cash & Equivalents	1%	1%	1.03%	1.24%	(0.00%)	(0.01%)	(0.02%)
<b>Total</b>			<b>5.38%</b>	<b>5.72%</b>	<b>(0.18%)</b>	<b>(0.16%)</b>	<b>(0.34%)</b>

\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

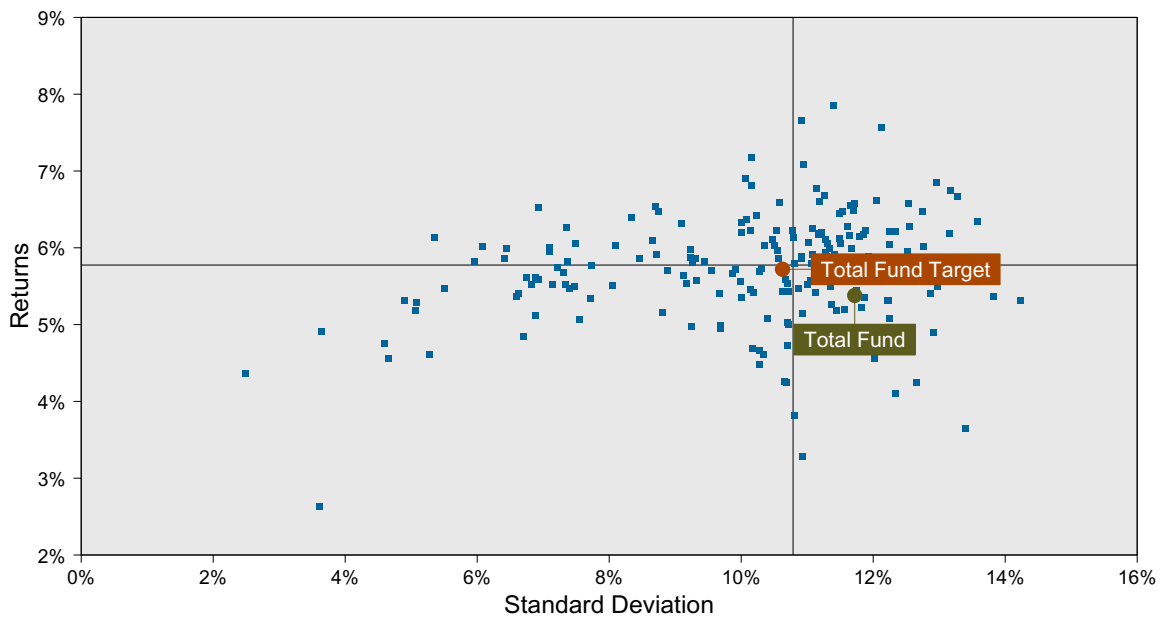
## Cumulative Performance Relative to Target

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the Public Fund Sponsor Database.

### Cumulative Returns Actual vs Target



### Ten Year Annualized Risk vs Return



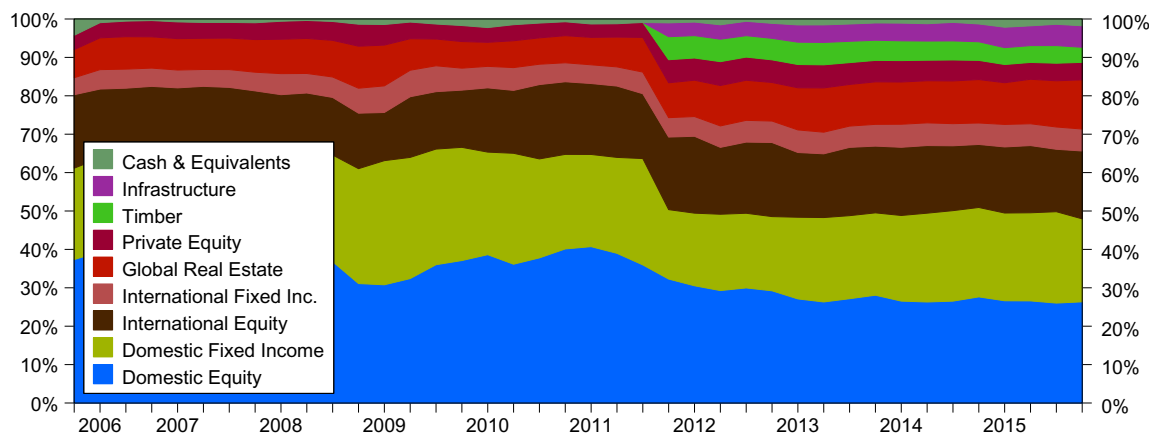
Squares represent membership of the Public Fund Sponsor Database

\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

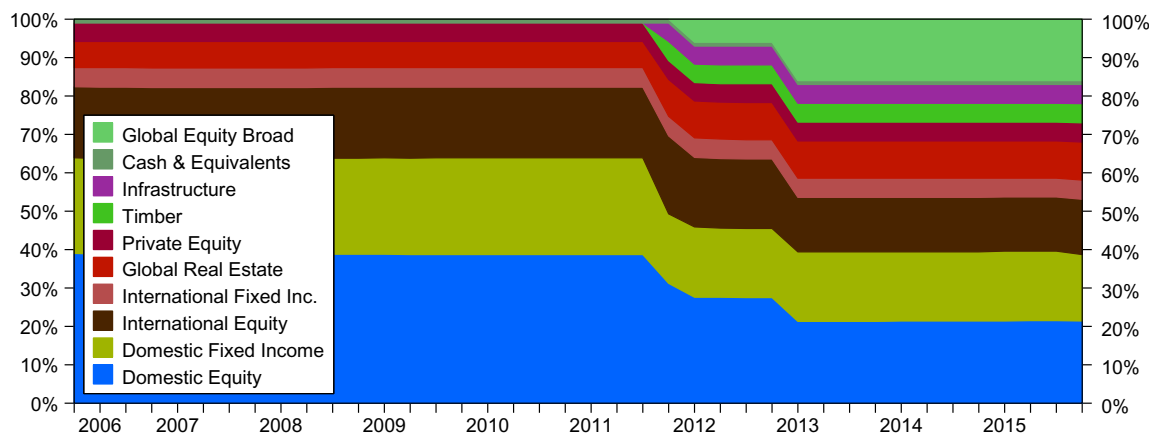
## Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Public Fund Sponsor Database.

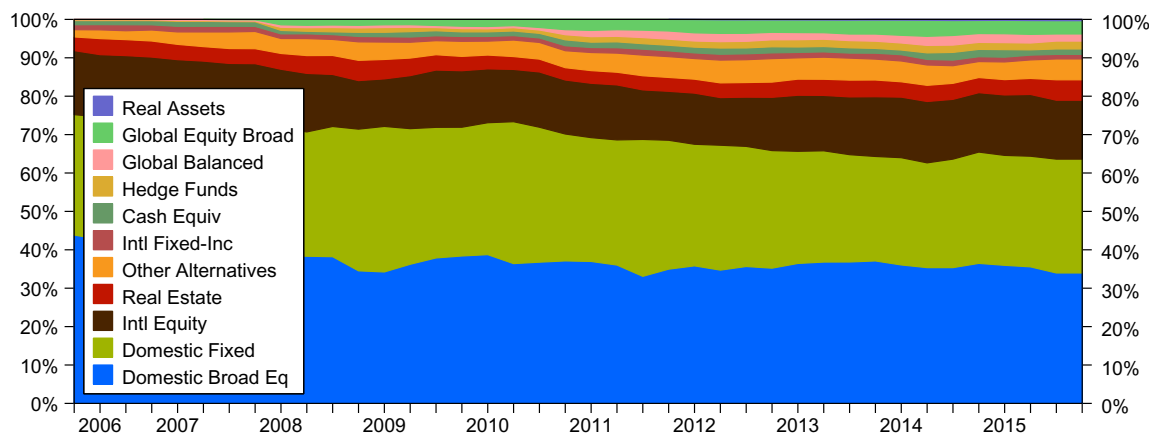
### Actual Historical Asset Allocation



### Target Historical Asset Allocation



### Average Public Fund Sponsor Database Historical Asset Allocation

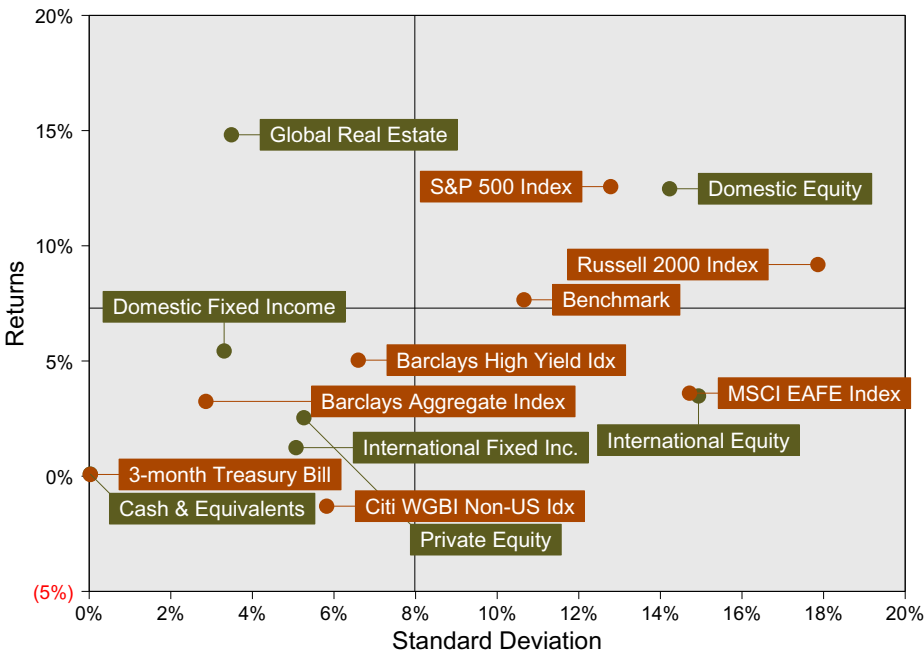


\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

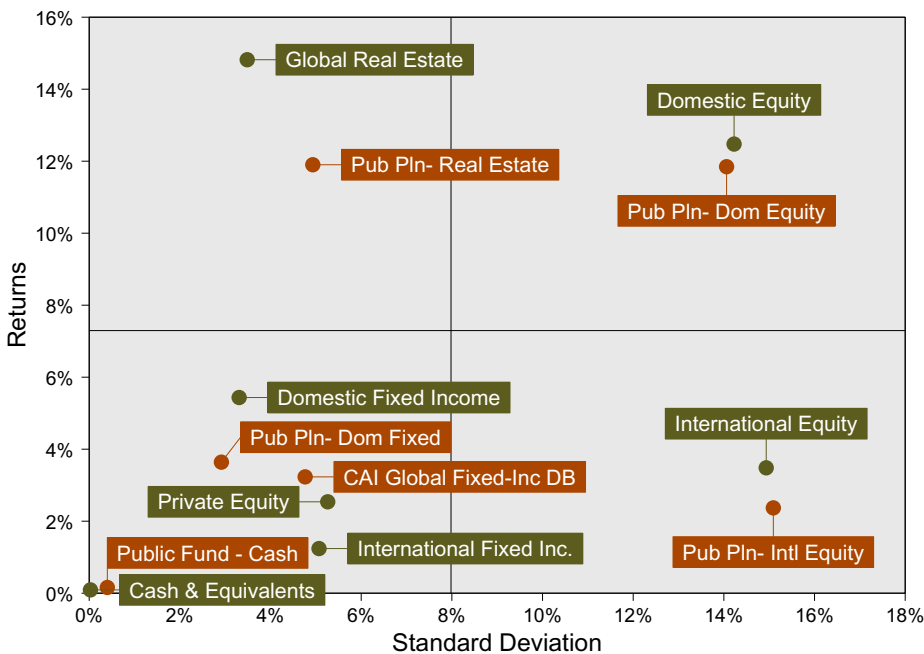
## Asset Class Risk and Return

The charts below show the five year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Five Year Annualized Risk vs Return  
Asset Classes vs Benchmark Indices



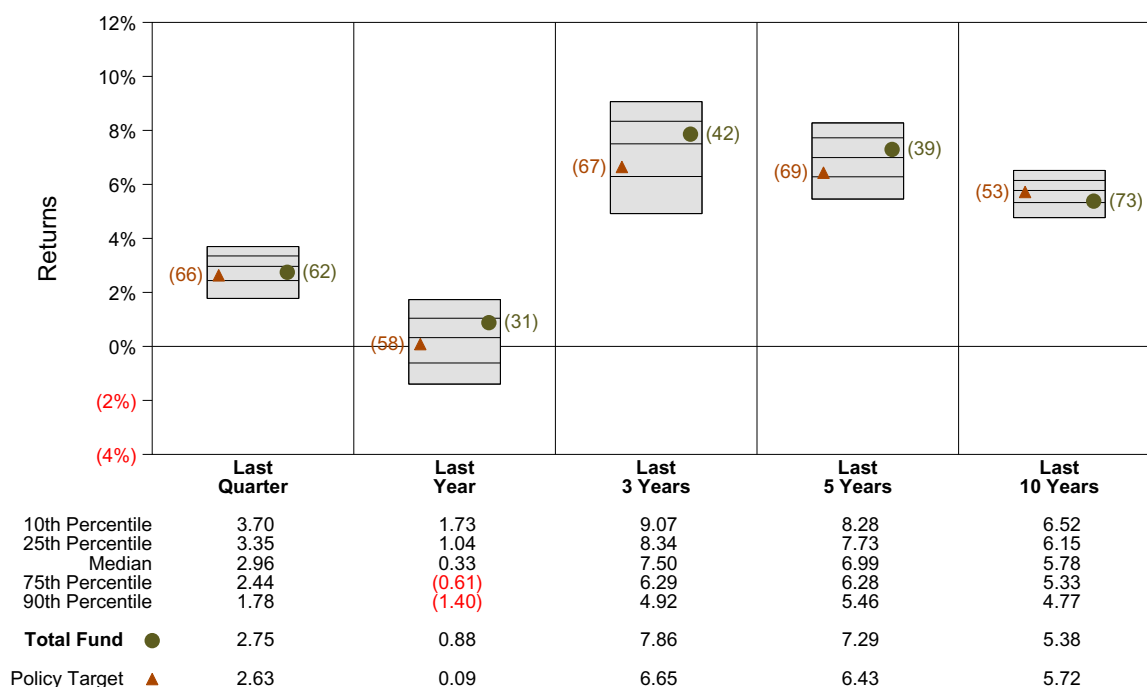
Five Year Annualized Risk vs Return  
Asset Classes vs Asset Class Median



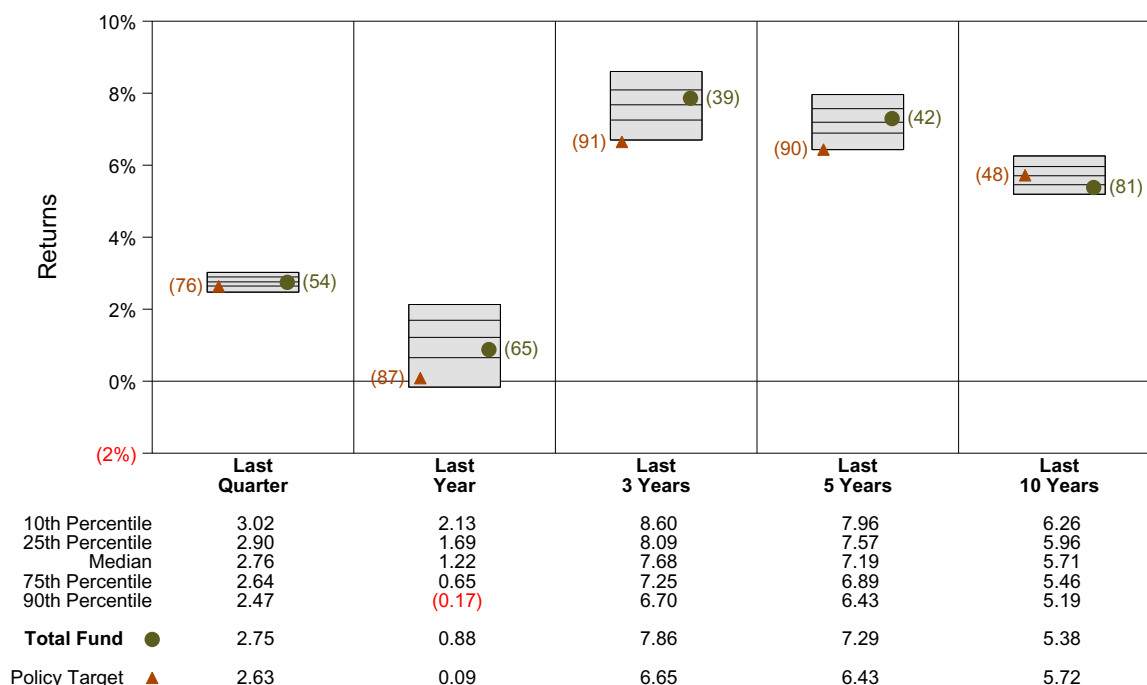
## Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the Public Fund Sponsor Database for periods ended December 31, 2015. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

### Public Fund Sponsor Database



### Asset Allocation Adjusted Ranking

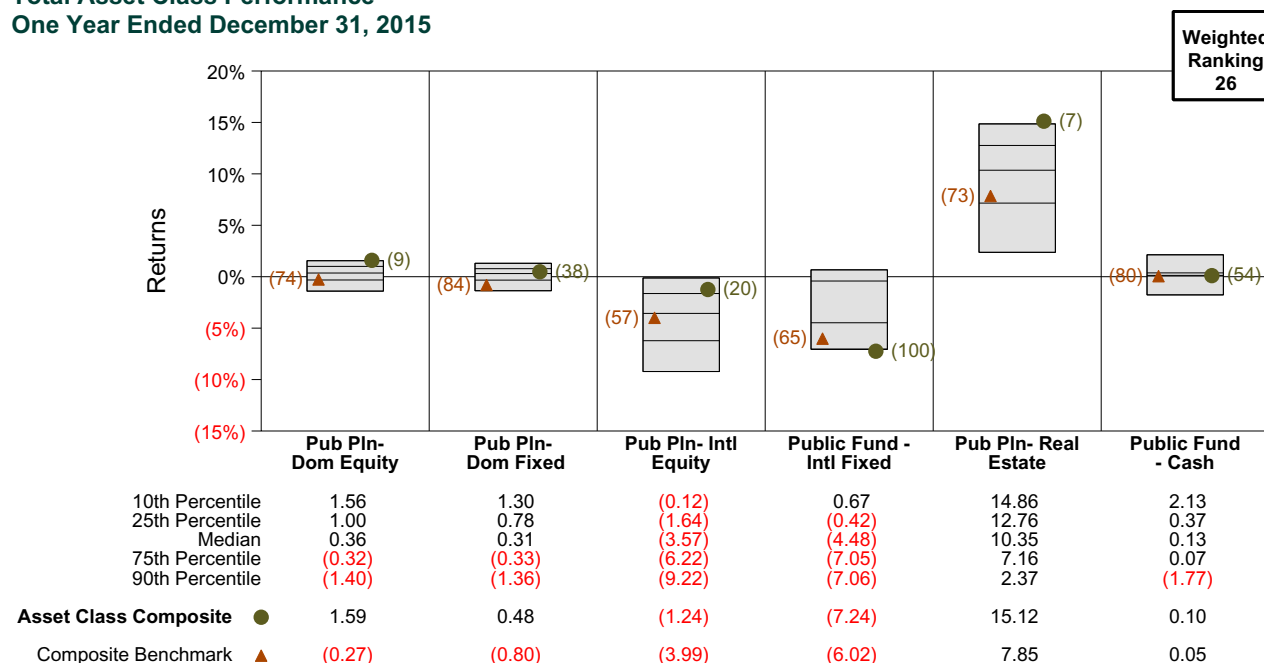


\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

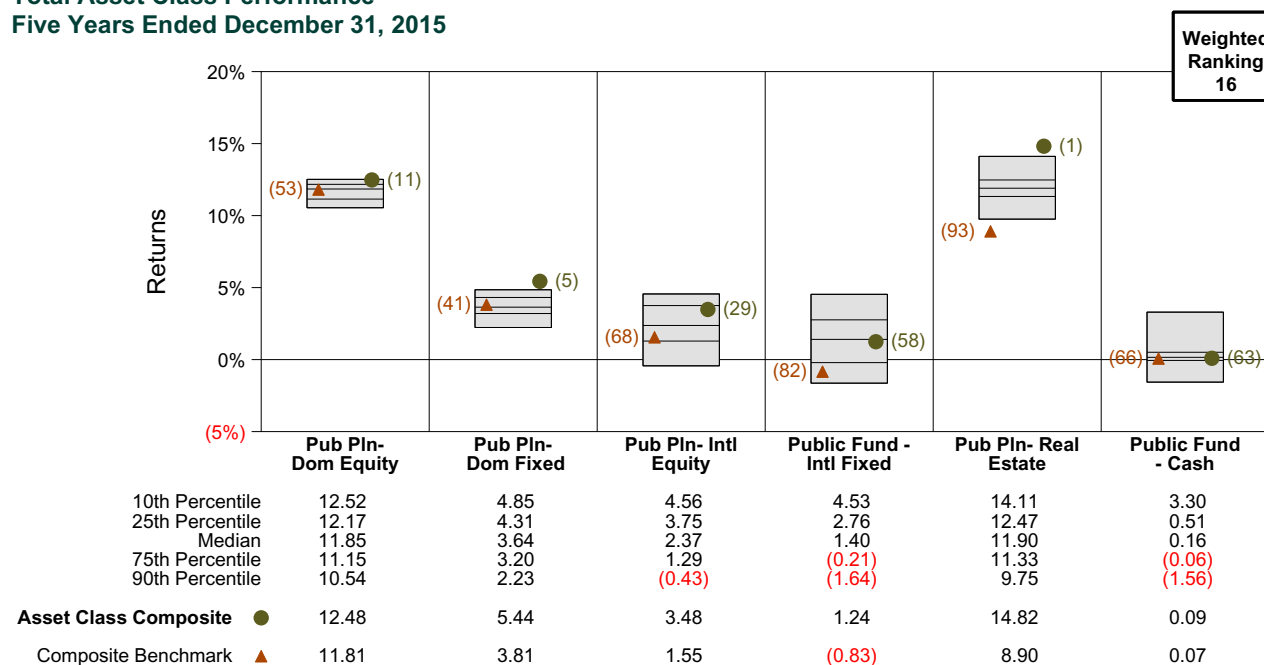
## Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

### Total Asset Class Performance One Year Ended December 31, 2015



### Total Asset Class Performance Five Years Ended December 31, 2015



\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2015, with the distribution as of September 30, 2015. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Distribution Across Investment Managers

	December 31, 2015				September 30, 2015	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
<b>GLOBAL EQUITY</b>	<b>\$2,604,888,443</b>	<b>56.82%</b>	<b>\$(1,601,600)</b>	<b>\$113,630,860</b>	<b>\$2,492,859,183</b>	<b>54.79%</b>
<b>Domestic Equity</b>	<b>\$1,014,213,411</b>	<b>22.12%</b>	<b>\$(51,635,320)</b>	<b>\$58,818,706</b>	<b>\$1,007,030,025</b>	<b>22.13%</b>
<b>Large Cap Domestic Equity</b>	<b>\$791,638,170</b>	<b>17.27%</b>	<b>\$(47,470,320)</b>	<b>\$51,344,629</b>	<b>\$787,763,862</b>	<b>17.31%</b>
L.A. Capital	303,526,819	6.62%	(16,912,211)	19,844,879	300,594,152	6.61%
LACM Enhanced Index	182,064,091	3.97%	(24,233,109)	12,181,875	194,115,326	4.27%
Northern Trust AM Enh S&P 500	131,075,605	2.86%	(2,725,000)	7,325,772	126,474,833	2.78%
Parametric Clifton Enh S&P 500	174,971,655	3.82%	(3,600,000)	11,992,104	166,579,551	3.66%
<b>Small Cap Domestic Equity</b>	<b>\$222,575,241</b>	<b>4.85%</b>	<b>\$(4,165,000)</b>	<b>\$7,474,077</b>	<b>\$219,266,164</b>	<b>4.82%</b>
Callan	110,865,377	2.42%	0	3,061,944	107,803,433	2.37%
Parametric Clifton Enh Small Cap	111,709,864	2.44%	(4,165,000)	4,412,134	111,462,731	2.45%
<b>International Equity</b>	<b>\$680,197,692</b>	<b>14.84%</b>	<b>\$22,183,256</b>	<b>\$28,910,369</b>	<b>\$629,104,067</b>	<b>13.83%</b>
<b>Developed Int'l Equity</b>	<b>\$524,965,050</b>	<b>11.45%</b>	<b>\$(316,744)</b>	<b>\$26,709,154</b>	<b>\$498,572,639</b>	<b>10.96%</b>
Capital Group	125,313,707	2.73%	(131,945)	5,782,239	119,663,413	2.63%
DFA Int'l Small Cap	74,875,091	1.63%	0	2,901,043	71,974,049	1.58%
Northern Trust AM World Ex US	229,636,515	5.01%	0	8,718,221	220,918,294	4.86%
Wellington Management Co.	95,139,737	2.08%	(184,799)	9,307,652	86,016,884	1.89%
<b>Emerging Markets Equity</b>	<b>\$155,232,643</b>	<b>3.39%</b>	<b>\$22,500,000</b>	<b>\$2,201,215</b>	<b>\$130,531,428</b>	<b>2.87%</b>
Axiom	115,886,735	2.53%	16,750,000	1,566,667	97,570,068	2.14%
DFA	39,345,908	0.86%	5,750,000	634,548	32,961,360	0.72%
<b>World Equity</b>	<b>\$734,983,564</b>	<b>16.03%</b>	<b>\$22,919,354</b>	<b>\$32,313,893</b>	<b>\$679,750,317</b>	<b>14.94%</b>
EPOCH Investment Partners	326,199,223	7.12%	9,115,039	18,353,224	298,730,960	6.57%
LSV Asset Management	408,784,341	8.92%	13,804,315	13,960,669	381,019,357	8.37%

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2015, with the distribution as of September 30, 2015. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Distribution Across Investment Managers

	December 31, 2015				September 30, 2015	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
<b>Private Equity</b>	<b>\$175,493,775</b>	<b>3.83%</b>	<b>\$4,931,110</b>	<b>\$(6,412,109)</b>	<b>\$176,974,774</b>	<b>3.89%</b>
Adams Street Direct Co-Invest Fd	8,988,800	0.20%	(1,542,935)	601,376	9,930,359	0.22%
Adams Street Direct Fund 2010	1,435,589	0.03%	(152,019)	104,191	1,483,417	0.03%
Adams Street 1998 Partnership	123,729	0.00%	0	1,995	121,734	0.00%
Adams Street 1999 Partnership	568,387	0.01%	0	37,245	531,142	0.01%
Adams Street 2000 Partnership	1,399,315	0.03%	0	(30,056)	1,429,371	0.03%
Adams Street 2001 Partnership	1,832,198	0.04%	0	(143,208)	1,975,406	0.04%
Adams Street 2002 Partnership	856,691	0.02%	0	(15,599)	872,290	0.02%
Adams Street 2003 Partnership	437,160	0.01%	0	(13,564)	450,724	0.01%
Adams Street 2010 Partnership	5,514,575	0.12%	66,799	318,875	5,128,901	0.11%
Adams Street 2008 Fund	7,391,174	0.16%	(267,926)	619,978	7,039,122	0.15%
Adams Street 1999 Non-US	407,100	0.01%	0	53,470	353,630	0.01%
Adams Street 2000 Non-US	723,946	0.02%	0	(44,833)	768,779	0.02%
Adams Street 2001 Non-US	346,607	0.01%	0	(34,456)	381,063	0.01%
Adams Street 2002 Non-US	1,112,540	0.02%	0	130,772	981,768	0.02%
Adams Street 2003 Non-US	778,419	0.02%	0	20,871	757,548	0.02%
Adams Street 2004 Non-US	528,195	0.01%	(87,968)	(30,940)	647,103	0.01%
Adams Street 2010 Non-US	2,559,596	0.06%	66,966	155,795	2,336,835	0.05%
Adams Street 2010 Non-US Emg	1,249,648	0.03%	67,500	76,997	1,105,151	0.02%
Adams Street 2015 Global Fd	810,000	0.02%	811,442	(1,442)	-	-
Adams Street BVCF IV Fund	3,768,072	0.08%	0	(59,842)	3,827,914	0.08%
Hearthstone Advisors MSII	1	0.00%	0	0	1	0.00%
Hearthstone Advisors MSIII	148,138	0.00%	0	(3,411)	151,549	0.00%
CorsAir III	13,695,940	0.30%	(23,593)	3,784,917	9,934,616	0.22%
ND Investors	11,075,982	0.24%	25,000	(25,000)	11,075,982	0.24%
CorsAir IV	23,595,413	0.51%	7,623,837	(786,896)	16,758,472	0.37%
Capital International V	9,122,087	0.20%	(2,715,362)	(3,755,872)	15,593,321	0.34%
Capital International VI	15,886,391	0.35%	2,130,395	(1,437,417)	15,193,413	0.33%
EIG Energy Fund XIV	14,075,841	0.31%	(747,081)	(3,560,173)	18,383,095	0.40%
Lewis & Clark, LP	2,724,490	0.06%	0	0	2,724,490	0.06%
Lewis & Clark II	9,435,908	0.21%	0	0	9,435,908	0.21%
Quantum Energy Partners	6,687,103	0.15%	288,791	(874,594)	7,272,906	0.16%
Quantum Resources	1	0.00%	(252,628)	(280,252)	532,881	0.01%
Matlin Patterson I	12,121	0.00%	0	0	12,121	0.00%
Matlin Patterson II	1,614,422	0.04%	0	98,705	1,515,717	0.03%
Matlin Patterson III	26,588,196	0.58%	(360,107)	(1,319,742)	28,268,045	0.62%

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2015, with the distribution as of September 30, 2015. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Distribution Across Investment Managers

	December 31, 2015				September 30, 2015	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
<b>GLOBAL FIXED INCOME</b>	<b>\$1,052,012,790</b>	<b>22.95%</b>	<b>\$(88,680,781)</b>	<b>\$(4,672,478)</b>	<b>\$1,145,366,048</b>	<b>25.17%</b>
<b>Domestic Fixed Income</b>	<b>\$831,759,853</b>	<b>18.14%</b>	<b>\$(86,053,403)</b>	<b>\$(2,872,548)</b>	<b>\$920,685,804</b>	<b>20.24%</b>
<b>Inv. Grade Fixed Income</b>	<b>\$591,855,730</b>	<b>12.91%</b>	<b>\$(74,643,277)</b>	<b>\$747,525</b>	<b>\$665,751,482</b>	<b>14.63%</b>
Declaration Total Return	84,726,314	1.85%	(30,314)	(457,846)	85,214,474	1.87%
J. P. Morgan MBS	122,871,434	2.68%	(2,565,192)	(625,583)	126,062,208	2.77%
PIMCO DiSCO II	89,513,106	1.95%	0	1,313,099	88,200,007	1.94%
PIMCO MBS	163,171,095	3.56%	(18,225,000)	(28,226)	181,424,321	3.99%
PIMCO Unconstrained	71,503,274	1.56%	(21,700,000)	1,271,386	91,931,887	2.02%
SSgA Long US Treas Index	60,070,508	1.31%	(32,122,771)	(725,306)	92,918,584	2.04%
<b>Below Inv. Grade Fixed Income</b>	<b>\$239,904,123</b>	<b>5.23%</b>	<b>\$(11,410,126)</b>	<b>\$(3,620,073)</b>	<b>\$254,934,322</b>	<b>5.60%</b>
Goldman Sachs 2006 Offshore	1,348,851	0.03%	(123,812)	61,746	1,410,917	0.03%
Goldman Sachs Offshore V	2,809,504	0.06%	(252,293)	140,026	2,921,771	0.06%
Loomis Sayles	191,038,407	4.17%	(19,784,021)	(4,394,612)	215,217,040	4.73%
PIMCO Bravo II Fund	44,707,361	0.98%	8,750,000	572,767	35,384,594	0.78%
<b>Internationall Fixed Income</b>	<b>\$220,252,936</b>	<b>4.80%</b>	<b>\$(2,627,378)</b>	<b>\$(1,799,929)</b>	<b>\$224,680,244</b>	<b>4.94%</b>
Brandywine	121,778,769	2.66%	(2,545,330)	(606,265)	124,930,365	2.75%
UBS Global Asset Mgmt.	98,474,167	2.15%	(82,048)	(1,193,664)	99,749,879	2.19%
<b>GLOBAL REAL ASSETS</b>	<b>\$859,765,362</b>	<b>18.75%</b>	<b>\$(14,642,181)</b>	<b>\$16,316,471</b>	<b>\$858,091,072</b>	<b>18.86%</b>
<b>Global Real Estate</b>	<b>\$493,077,437</b>	<b>10.76%</b>	<b>\$14,720,503</b>	<b>\$12,494,443</b>	<b>\$465,862,491</b>	<b>10.24%</b>
Invesco Core Real Estate	212,871,072	4.64%	19,839,010	5,178,703	187,853,360	4.13%
Invesco Fund II	9,131,117	0.20%	(2,000,114)	678,228	10,453,003	0.23%
Invesco Fund III	26,789,452	0.58%	(6,000,000)	678,656	32,110,796	0.71%
Invesco Asia RE Feeder	7,274,061	0.16%	(255,000)	2,043,741	5,485,321	0.12%
Invesco Asia RE Fund III	8,522,500	0.19%	8,540,000	(17,500)	-	-
Invesco Value Added Fd IV	17,111,241	0.37%	(5,345,300)	(455,752)	22,912,293	0.50%
JP Morgan	178,395,097	3.89%	0	5,961,449	172,433,648	3.79%
JP Morgan Alternative Fd	303,703	0.01%	(50,811)	0	354,513	0.01%
JP Morgan China Property Fd	9,808,819	0.21%	(3,762)	(64,131)	9,876,712	0.22%
JP Morgan Greater European Opp Fd	22,870,375	0.50%	(3,520)	(1,508,950)	24,382,845	0.54%
<b>Timber</b>	<b>\$150,949,460</b>	<b>3.29%</b>	<b>\$(30,000,042)</b>	<b>\$3,550,364</b>	<b>\$177,399,138</b>	<b>3.90%</b>
TIR Teredo	32,584,238	0.71%	(29,600,038)	1,289,621	60,894,655	1.34%
TIR Springbank	118,365,222	2.58%	(400,003)	2,260,742	116,504,483	2.56%
<b>Infrastructure</b>	<b>\$215,738,465</b>	<b>4.71%</b>	<b>\$637,358</b>	<b>\$271,664</b>	<b>\$214,829,443</b>	<b>4.72%</b>
JP Morgan Asian Infrastructure	29,053,590	0.63%	(25,018)	(1,521,392)	30,600,000	0.67%
JP Morgan IIF	139,963,800	3.05%	(384,419)	498,197	139,850,021	3.07%
Grosvenor Cust. Infrastructure	38,815,319	0.85%	(1,754,397)	549,484	40,020,232	0.88%
Grosvenor Cust. Infrastructure II	7,905,756	0.17%	2,801,191	745,375	4,359,190	0.10%
<b>CASH &amp; CASH EQUIVALENTS</b>	<b>\$67,914,951</b>	<b>1.48%</b>	<b>\$14,534,022</b>	<b>\$21,414</b>	<b>\$53,359,514</b>	<b>1.17%</b>
Cash Account	67,914,951	1.48%	14,534,022	21,414	53,359,514	1.17%
<b>Securities Lending Income</b>	<b>\$0</b>	<b>0.00%</b>	<b>\$(176,791)</b>	<b>\$176,791</b>	<b>-</b>	<b>-</b>
<b>Total Fund</b>	<b>\$4,584,581,545</b>	<b>100.0%</b>	<b>\$(90,567,331)</b>	<b>\$125,473,058</b>	<b>\$4,549,675,818</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
<b>Global Equity</b>					
Gross	4.55%	(0.91%)	9.94%	-	-
Net	4.51%	(1.22%)	9.55%	-	-
Wtd Avg Global Equity Benchmark	4.44%	(1.95%)	8.76%	-	-
<b>Domestic Equity</b>					
Gross	5.82%	1.59%	15.73%	12.48%	6.39%
Net	5.80%	1.44%	15.47%	12.20%	6.07%
Wtd Avg Domestic Equity Benchmark	5.85%	(0.27%)	14.30%	11.81%	7.27%
<b>Large Cap Equity</b>					
Gross	6.54%	3.50%	16.76%	13.12%	5.83%
Net	6.51%	3.36%	16.56%	12.92%	5.58%
Large Cap Benchmark (1)	6.50%	0.92%	15.01%	12.58%	7.31%
L.A. Capital - Gross	6.66%	7.22%	18.00%	13.80%	9.09%
L.A. Capital - Net	6.61%	7.00%	17.76%	13.56%	8.88%
Russell 1000 Growth Index	7.32%	5.67%	16.83%	13.53%	8.53%
LACM Enhanced Index - Gross	6.43%	2.70%	16.31%	12.92%	8.09%
LACM Enhanced Index - Net	6.41%	2.58%	16.17%	12.78%	7.92%
Russell 1000 Index	6.50%	0.92%	15.01%	12.44%	7.40%
Northern Tr AM Enh S&P500 - Gross	5.82%	(0.89%)	15.81%	13.38%	7.38%
Northern Tr AM Enh S&P500 - Net	5.82%	(1.11%)	15.34%	13.02%	7.19%
S&P 500 Index	7.04%	1.38%	15.13%	12.57%	7.31%
Parametric Clifton Enh S&P500 - Gross	7.18%	1.35%	15.04%	-	-
Parametric Clifton Enh S&P500 - Net	7.18%	1.35%	15.03%	-	-
S&P 500 Index	7.04%	1.38%	15.13%	12.57%	7.31%
<b>Small Cap Equity</b>					
Gross	3.36%	(4.72%)	12.02%	10.23%	7.56%
Net	3.36%	(4.90%)	11.58%	9.73%	7.04%
Russell 2000 Index	3.59%	(4.41%)	11.65%	9.19%	6.80%
Callan - Net	2.84%	(6.03%)	11.05%	8.60%	-
Russell 2000 Index	3.59%	(4.41%)	11.65%	9.19%	6.80%
Parametric Clifton Enh SmCap - Gross	3.86%	(3.43%)	12.53%	10.40%	-
Parametric Clifton Enh SmCap - Net	3.86%	(3.79%)	12.05%	9.90%	-
Russell 2000 Index	3.59%	(4.41%)	11.65%	9.19%	6.80%

(1) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
<b>International Equity</b>					
Gross	4.62%	(1.24%)	4.63%	3.48%	4.73%
Net	4.57%	(1.43%)	4.31%	3.12%	4.32%
Wtd Avg Int'l Equity Benchmark	3.81%	(3.99%)	2.40%	1.55%	3.15%
<b>Developed Intl Equity</b>					
Gross	5.36%	1.76%	7.07%	4.72%	3.94%
Net	5.29%	1.51%	6.75%	4.38%	3.58%
Benchmark(1)	4.71%	(0.81%)	5.01%	3.37%	2.55%
Capital Group - Gross	4.83%	(2.97%)	5.15%	3.89%	2.62%
Capital Group - Net	4.72%	(3.37%)	4.69%	3.57%	2.38%
Benchmark(1)	4.71%	(0.81%)	5.01%	3.37%	2.55%
DFA Int'l Small Cap Value - Net	4.03%	3.99%	9.36%	5.71%	-
World ex US SC Value	3.78%	1.06%	6.71%	3.85%	4.56%
Northern Tr AM World ex US - Gross	3.95%	(2.70%)	-	-	-
Northern Tr AM World ex US - Net	3.95%	(2.73%)	-	-	-
MSCI World ex US	3.91%	(3.04%)	3.93%	2.79%	2.92%
Wellington Management - Gross	10.83%	19.98%	15.36%	10.63%	8.01%
Wellington Management - Net	10.61%	19.01%	14.41%	9.70%	7.11%
BMI, EPAC, <\$2 B	6.01%	9.32%	9.19%	5.13%	4.12%
<b>Emerging Markets Equity</b>					
Gross	2.04%	(11.42%)	(4.27%)	(1.25%)	5.58%
Net	2.04%	(11.42%)	(4.61%)	(1.67%)	5.06%
Emerging Mkts - Net	0.66%	(14.92%)	(6.76%)	(4.80%)	3.61%
Axiom - Net	2.03%	(12.16%)	-	-	-
Emerging Mkts - Net	0.66%	(14.92%)	(6.76%)	(4.80%)	3.61%
DFA - Net	2.41%	(8.70%)	(2.48%)	(2.24%)	7.20%
Emerging Mkts - Net	0.66%	(14.92%)	(6.76%)	(4.80%)	3.61%
<b>World Equity</b>					
Gross	4.83%	(2.00%)	9.83%	-	-
Net	4.75%	(2.74%)	9.03%	-	-
MSCI World Index	5.50%	(0.87%)	9.63%	7.59%	4.98%
EPOCH Investment - Gross(2)	6.16%	0.49%	11.55%	-	-
EPOCH Investment - Net	6.01%	(0.14%)	10.79%	-	-
MSCI World Index	5.50%	(0.87%)	9.63%	7.59%	4.98%
LSV Asset Management - Gross(3)	3.82%	(3.88%)	-	-	-
LSV Asset Management - Net	3.80%	(4.70%)	-	-	-
MSCI ACWI Idx	5.15%	(1.84%)	8.26%	6.66%	5.31%

(1) MSCI EAFE through 12/31/1996; 50% Hedged EAFE through 3/31/2011 and MSCI EAFE again thereafter.

(2) EPOCH Investment was removed from the Domestic Equity Composite to the World Equity Composite as of 1/1/2012.

(3) LSV Asset Management was removed from the Domestic Equity and International Equity Composites to the World Equity Composite as of February 1, 2013.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
<b>Private Equity*</b>					
Net	(3.57%)	(8.25%)	(0.24%)	2.48%	2.64%
Adams Street Direct Co-Invest Fd	6.06%	14.72%	21.13%	16.67%	-
Adams Street Direct Fund 2010	7.70%	16.78%	18.21%	14.44%	-
Adams Street 1998 Partnership	1.64%	3.06%	4.60%	1.82%	1.72%
Adams Street 1999 Partnership	7.01%	(4.97%)	2.14%	4.56%	4.57%
Adams Street 2000 Partnership	(2.10%)	(5.47%)	(1.36%)	3.83%	5.56%
Adams Street 2001 Partnership	(7.25%)	(8.82%)	4.49%	6.94%	5.86%
Adams Street 2002 Partnership	(1.79%)	(8.63%)	(0.74%)	5.25%	5.22%
Adams Street 2003 Partnership	(3.01%)	8.61%	14.60%	9.60%	8.36%
Adams Street 2010 Partnership	6.21%	18.39%	15.62%	13.89%	-
Adams Street 2008 Fund	8.80%	12.65%	13.43%	10.28%	-
Adams Street 1999 Non-US	15.12%	7.26%	6.40%	13.32%	17.25%
Adams Street 2000 Non-US	(5.83%)	(0.73%)	(2.23%)	(0.01%)	7.57%
Adams Street 2001 Non-US	(9.04%)	56.16%	29.70%	15.62%	6.66%
Adams Street 2002 Non-US	13.32%	12.08%	3.83%	6.25%	9.63%
Adams Street 2003 Non-US	2.76%	15.79%	10.51%	10.11%	15.11%
Adams Street 2004 Non-US	(5.10%)	3.14%	8.95%	7.31%	6.55%
Adams Street 2010 Non-US	6.67%	4.52%	7.00%	4.49%	-
Adams Street 2010 Non-US Emg	6.99%	17.30%	9.56%	(3.18%)	-
Adams Street BVCF IV Fund	(1.56%)	7.53%	31.60%	37.30%	30.72%
CorsAir III	38.19%	24.21%	6.33%	2.76%	-
ND Investors	(0.23%)	(5.28%)	0.46%	1.17%	-
CorsAir IV	(4.27%)	16.78%	16.93%	5.52%	-
Capital International V	(25.36%)	(32.87%)	(13.43%)	(3.63%)	-
Capital International VI	(8.30%)	(23.20%)	(17.66%)	-	-
EIG Energy Fund XIV	(19.35%)	(37.12%)	(16.11%)	(7.59%)	-
Lewis & Clark, LP	0.00%	(32.09%)	(13.56%)	(5.81%)	0.97%
Lewis & Clark II	0.00%	(14.35%)	(8.65%)	(7.39%)	-
Quantum Energy Partners	(11.57%)	(36.79%)	1.68%	9.64%	-
Matlin Patterson I	0.00%	0.00%	(1.77%)	641.83%	178.43%
Matlin Patterson II	6.51%	26.60%	(1.41%)	(34.33%)	(23.86%)
Matlin Patterson III	(4.67%)	1.22%	3.17%	23.57%	-

\* Corsair III and North Dakota Investors were taken out from the Private Equity Composite on July 1, 2009. They were then added back into the Private Equity Composite on October 1, 2011. At this time Corsair IV, Capital Intl and EIG were also added to this composite.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
<b>Global Fixed Income</b>					
Gross	(0.48%)	(1.08%)	1.96%	-	-
Net	(0.53%)	(1.31%)	1.73%	-	-
Wtd Avg Global FI Benchmark	(1.02%)	(1.90%)	0.33%	-	-
<b>Domestic Fixed Income</b>					
Gross	(0.40%)	0.48%	3.34%	5.44%	5.83%
Net	(0.44%)	0.28%	3.14%	5.22%	5.56%
Wtd Avg Domestic FI Benchmark	(0.99%)	(0.80%)	1.54%	3.81%	5.29%
<b>Inv. Grade Fixed Income</b>					
Gross	0.10%	1.75%	3.20%	4.88%	5.65%
Net	0.09%	1.64%	3.09%	4.72%	5.43%
Barclays Aggregate Index	(0.57%)	0.55%	1.44%	3.25%	4.51%
Declaration Total Return - Net	(0.54%)	2.25%	3.96%	-	-
Libor-3 Month	0.09%	0.30%	0.27%	0.32%	1.66%
J.P. Morgan MBS - Gross	(0.50%)	1.91%	-	-	-
J.P. Morgan MBS - Net	(0.55%)	1.70%	-	-	-
Barclays Mortgage	(0.10%)	1.51%	2.01%	2.96%	4.64%
PIMCO Unconstrained - Gross(1)	1.41%	(0.66%)	(0.06%)	-	-
PIMCO Unconstrained - Net	1.41%	(0.83%)	(0.24%)	-	-
Blended Benchmark(2)	0.09%	0.30%	0.34%	-	-
PIMCO DiSCO II - Net	1.49%	5.15%	7.99%	-	-
Barclays Aggregate Index	(0.57%)	0.55%	1.44%	3.25%	4.51%
PIMCO MBS - Gross	(0.02%)	1.79%	1.72%	-	-
PIMCO MBS - Net	(0.02%)	1.66%	1.56%	-	-
Barclays Mortgage	(0.10%)	1.51%	2.01%	2.96%	4.64%
SSgA Long US Treas Idx - Gross	(1.38%)	(1.22%)	-	-	-
SSgA Long US Treas Idx - Net	(1.39%)	(1.26%)	-	-	-
Barclays Long Treas	(1.38%)	(1.21%)	2.57%	7.74%	6.73%
<b>Below Inv. Grade Fixed Income</b>					
Gross	(1.65%)	(2.72%)	3.70%	6.79%	5.96%
Net	(1.75%)	(3.13%)	3.24%	6.44%	5.56%
Barclays HY Corp 2% Issue	(2.06%)	(4.43%)	1.70%	5.03%	6.95%
Goldman Sachs 2006 Offshore - Net	4.80%	18.04%	23.53%	13.43%	-
Goldman Sachs Offshore V - Net	5.25%	7.62%	13.13%	15.19%	-
PIMCO Bravo II Fund - Net	1.62%	8.37%	-	-	-
Barclays HY Corp 2% Issue	(2.06%)	(4.43%)	1.70%	5.03%	6.95%
Loomis Sayles - Gross	(2.50%)	(4.76%)	2.40%	5.55%	7.14%
Loomis Sayles - Net	(2.62%)	(5.23%)	1.90%	5.17%	6.78%
Barclays HY Corp 2% Issue	(2.06%)	(4.43%)	1.70%	5.03%	6.95%

(1) The product changed from Commingled Fund to Separate Account in March 2014.

(2) Libor-3 month through Feb. 28, 2014; Fund's performance through March 31, 2014; Libor-3 month thereafter.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
<b>International Fixed Income</b>					
Gross	(0.80%)	(7.24%)	(3.27%)	1.24%	4.61%
Net	(0.89%)	(7.58%)	(3.62%)	0.95%	4.37%
Wtd Avg Int'l FI Benchmark	(1.26%)	(6.02%)	(4.07%)	(0.83%)	3.26%
Brandywine - Gross	(0.50%)	(8.05%)	(1.81%)	3.57%	6.17%
Brandywine - Net	(0.59%)	(8.39%)	(2.19%)	3.30%	5.99%
Barclays Global Aggregate	(0.92%)	(3.15%)	(1.74%)	0.90%	3.74%
UBS Global Asset Mgmt. - Gross	(1.20%)	(6.08%)	(4.67%)	(1.16%)	2.82%
UBS Global Asset Mgmt. - Net	(1.28%)	(6.39%)	(4.97%)	(1.47%)	2.51%
Blended Benchmark(1)	(1.26%)	(6.02%)	(4.07%)	(0.84%)	3.26%
<b>Global Real Assets</b>					
Gross	1.87%	9.31%	9.28%	-	-
Net	1.77%	8.85%	8.86%	-	-
Wtd Avg Global Real Assets Benchmark	1.71%	7.85%	8.18%	-	-
<b>Global Real Estate</b>					
Gross	2.53%	15.12%	14.84%	14.82%	6.29%
Net	2.41%	14.50%	14.28%	14.02%	4.54%
NCREIF Total Index	2.91%	13.33%	12.04%	12.18%	7.76%
Invesco Core Real Estate - Gross	2.49%	14.71%	14.56%	13.32%	7.16%
Invesco Core Real Estate - Net	2.41%	14.33%	14.11%	12.88%	6.63%
Invesco Fund II - Net	6.49%	7.81%	13.51%	19.74%	-
Invesco Fund III - Net	2.11%	11.44%	17.08%	-	-
Invesco Asia RE Feeder - Net	37.25%	67.57%	18.26%	9.89%	-
Invesco Value Added Fd IV - Net	(1.99%)	-	-	-	-
JP Morgan - Gross	3.46%	16.55%	15.14%	15.02%	7.11%
JP Morgan - Net	3.22%	15.19%	13.99%	13.95%	6.03%
JP Morgan Alternative Fd - Net	0.00%	(26.73%)	(10.28%)	0.69%	(5.77%)
JP Morgan China Property Fd - Net	(0.65%)	13.35%	23.80%	14.72%	-
JP Morgan Greater European Opp Fd - Net	(6.19%)	3.03%	14.70%	*****0%	-
NCREIF Total Index	2.91%	13.33%	12.04%	12.18%	7.76%
<b>Timber</b>					
Net	2.02%	5.68%	2.13%	-	-
TIR Teredo	2.13%	16.90%	7.51%	6.31%	10.38%
TIR Springbank	1.94%	(0.05%)	(0.84%)	(1.93%)	2.51%
NCREIF Timberland Index	1.86%	4.97%	8.35%	6.84%	6.92%
<b>Infrastructure</b>					
Gross	0.13%	(0.01%)	4.94%	-	-
Net	(0.02%)	(0.53%)	4.34%	-	-
JP Morgan Asian Infrastructure - Net	(4.97%)	(7.62%)	(1.01%)	2.49%	-
JP Morgan IIF - Gross	0.36%	(0.04%)	4.88%	6.22%	-
JP Morgan IIF - Net	0.13%	(0.82%)	3.94%	5.11%	-
Grosvenor Cust. Infrastructure - Net	1.43%	3.91%	9.11%	-	-
Grosvenor Cust. Infrastructure II - Net	15.09%	-	-	-	-
CPI-W	(0.80%)	0.38%	0.72%	1.40%	1.83%
<b>Cash &amp; Cash Equivalents - Net</b>					
Cash Account - Net	0.04%	0.10%	0.07%	0.09%	1.03%
3-month Treasury Bill	0.03%	0.05%	0.05%	0.07%	1.24%
<b>Total Fund</b>					
Gross	2.75%	0.88%	7.86%	7.29%	5.38%
Net	2.69%	0.56%	7.50%	6.87%	5.16%
Target*	2.63%	0.09%	6.65%	6.43%	5.72%

\* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 12.3% Barclays Aggregate Index, 11.2% MSCI EAFE Index, 9.9% NCREIF Total Index, 5.0% CPI-W, 5.0% NDSIB PEN - Private Equity, 5.0% Barclays HY Corp 2% Issue, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.9% Russell 2000 Index, 3.2% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

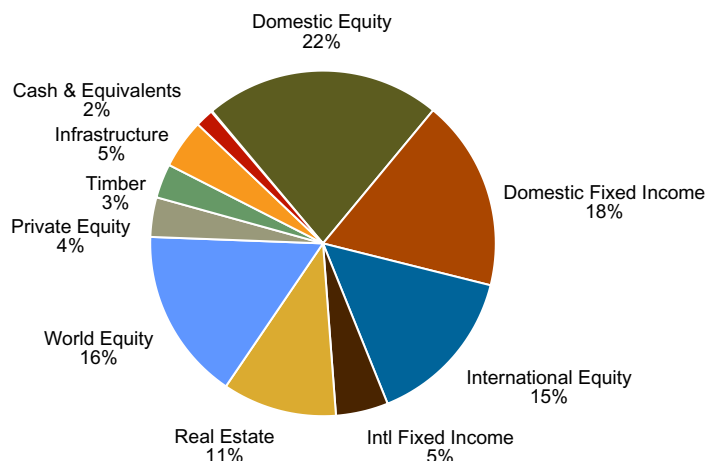
(1) Citigroup Non-US Govt through 12/31/2009 and the Barclays Global Aggregate Index ex US thereafter.



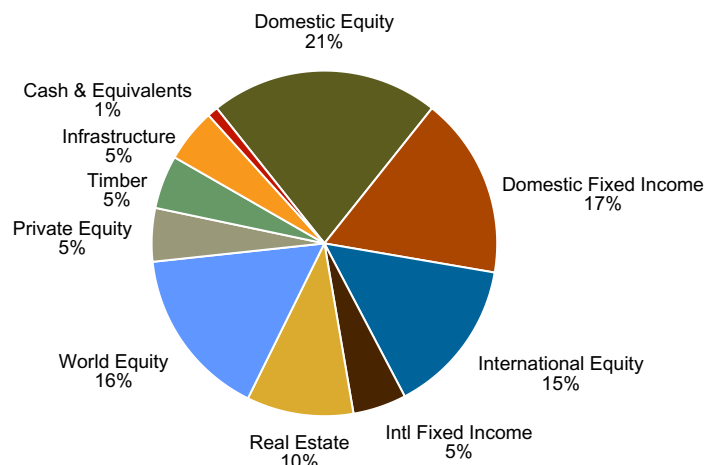
## Actual vs Target Asset Allocation As of December 31, 2015

The top left chart shows the Fund's asset allocation as of December 31, 2015. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Public Fund Sponsor Database.

**Actual Asset Allocation**

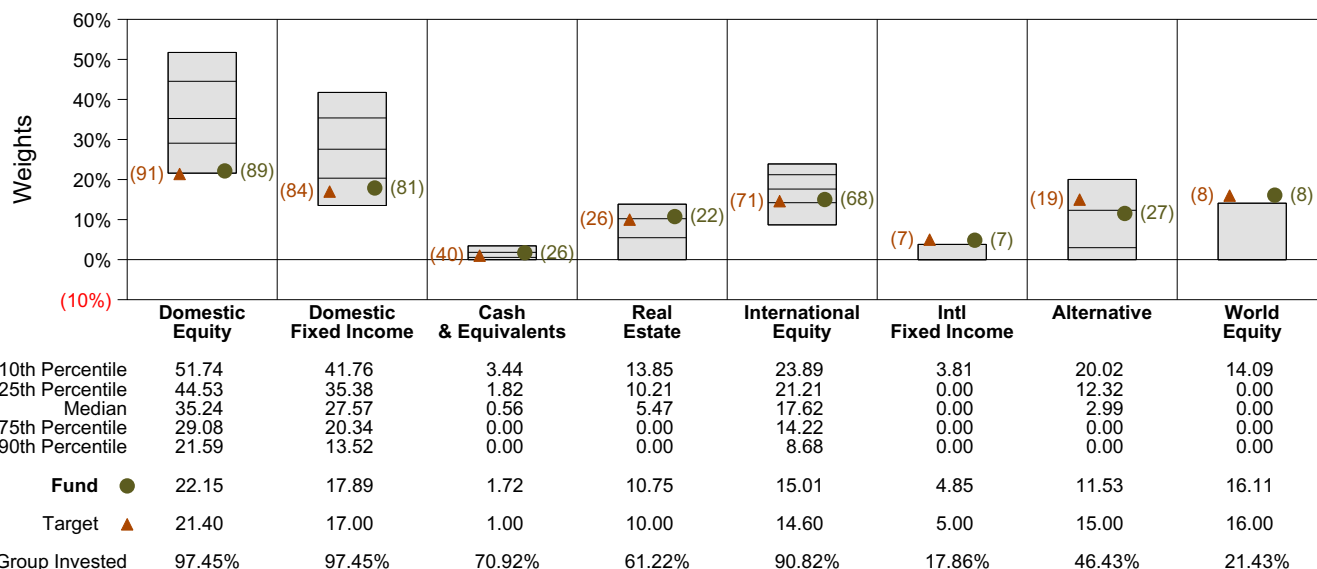


**Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	525,261	22.1%	21.4%	0.7%	17,777
Domestic Fixed Income	424,168	17.9%	17.0%	0.9%	21,027
International Equity	355,949	15.0%	14.6%	0.4%	9,722
Intl Fixed Income	115,049	4.9%	5.0%	(0.1%)	(3,522)
Real Estate	254,893	10.7%	10.0%	0.7%	17,751
World Equity	381,946	16.1%	16.0%	0.1%	2,519
Private Equity	88,043	3.7%	5.0%	(1.3%)	(30,528)
Timber	76,247	3.2%	5.0%	(1.8%)	(42,323)
Infrastructure	109,140	4.6%	5.0%	(0.4%)	(9,431)
Cash & Equivalents	40,723	1.7%	1.0%	0.7%	17,009
Total	2,371,419	100.0%	100.0%		

### Asset Class Weights vs Public Fund Sponsor Database

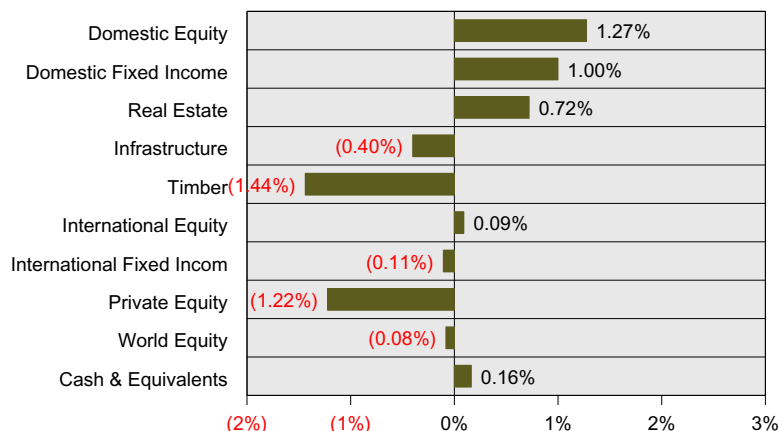


\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

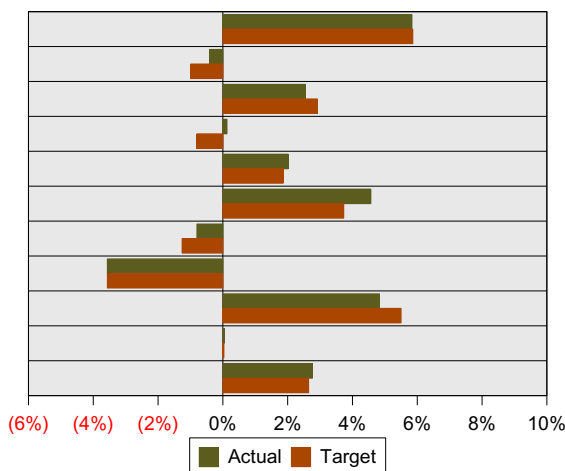
## Quarterly Total Fund Relative Attribution - December 31, 2015

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

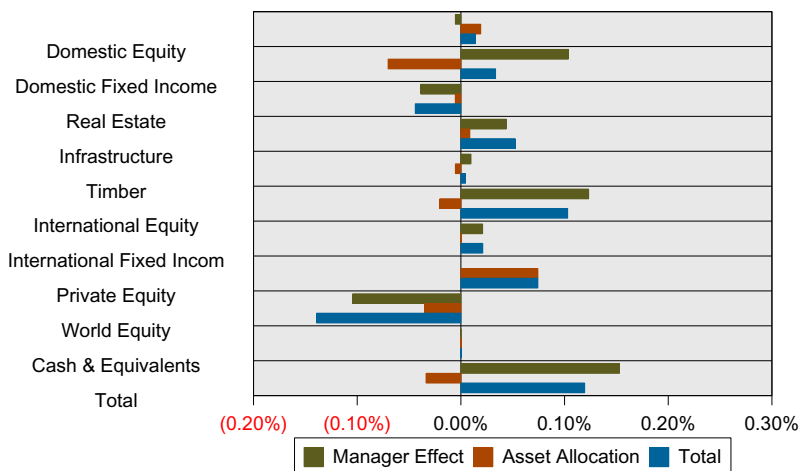
### Asset Class Under or Overweighting



### Actual vs Target Returns



### Relative Attribution by Asset Class



### Relative Attribution Effects for Quarter ended December 31, 2015

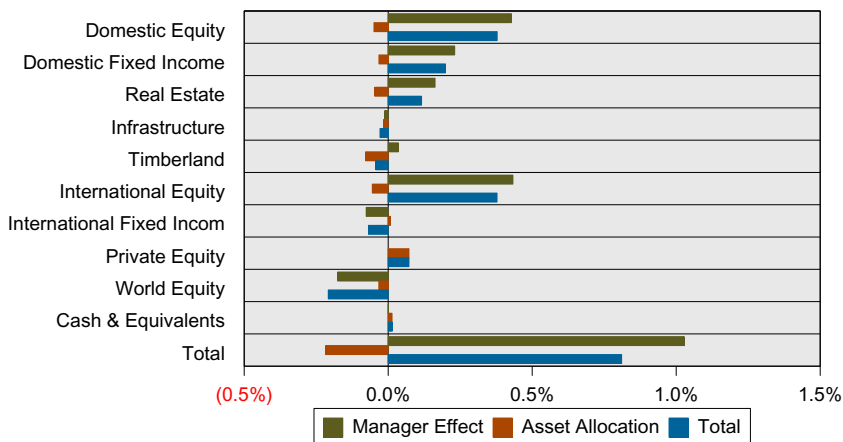
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	5.84%	5.86%	(0.01%)	0.02%	0.01%
Domestic Fixed Income	18%	17%	(0.41%)	(0.99%)	0.10%	(0.07%)	0.03%
Real Estate	11%	10%	2.54%	2.91%	(0.04%)	(0.01%)	(0.04%)
Infrastructure	5%	5%	0.13%	(0.80%)	0.04%	0.01%	0.05%
Timber	4%	5%	2.01%	1.86%	0.01%	(0.01%)	0.00%
International Equity	15%	15%	4.57%	3.73%	0.12%	(0.02%)	0.10%
International Fixed Income	5%	5%	(0.80%)	(1.26%)	0.02%	0.00%	0.02%
Private Equity	4%	5%	(3.57%)	(3.57%)	0.00%	0.07%	0.07%
World Equity	16%	16%	4.83%	5.50%	(0.10%)	(0.03%)	(0.14%)
Cash & Equivalents	1%	1%	0.04%	0.03%	0.00%	0.00%	0.00%
<b>Total</b>			<b>2.77%</b>	<b>2.65%</b>	<b>0.15%</b>	<b>(0.03%)</b>	<b>0.12%</b>

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

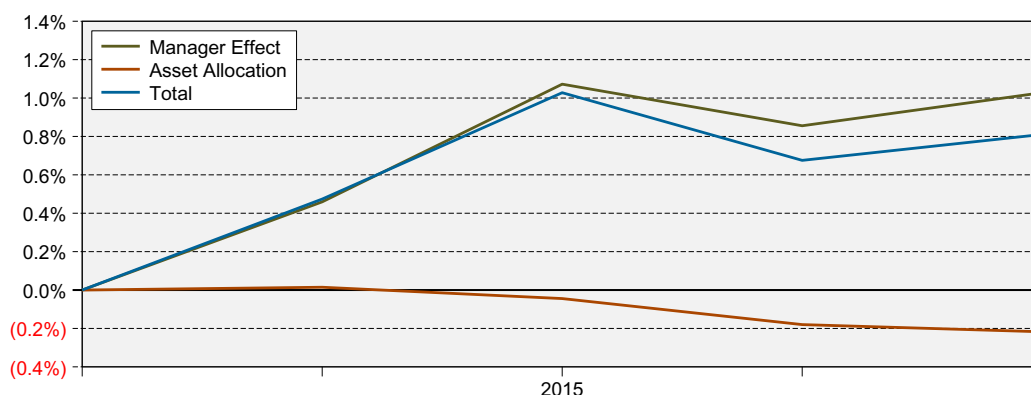
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

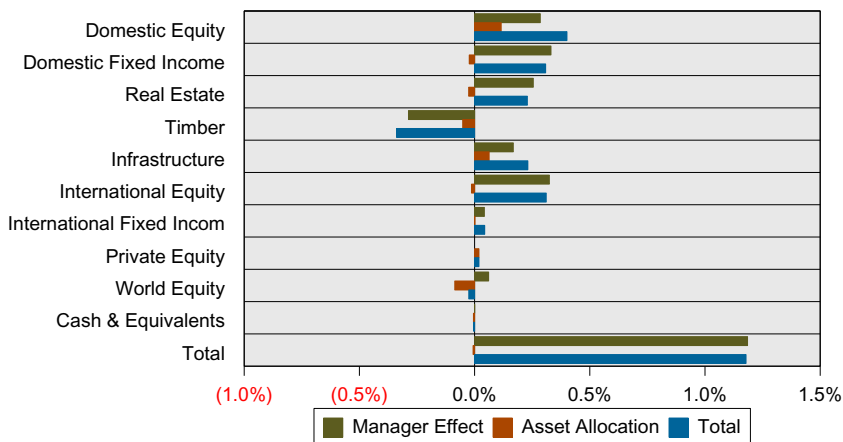
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	1.62%	(0.25%)	0.43%	(0.05%)	0.38%
Domestic Fixed Income	18%	17%	0.41%	(0.89%)	0.23%	(0.03%)	0.20%
Real Estate	10%	10%	15.26%	13.33%	0.16%	(0.05%)	0.12%
Infrastructure	4%	5%	(0.02%)	0.38%	(0.01%)	(0.02%)	(0.03%)
Timberland	4%	5%	5.68%	4.97%	0.04%	(0.08%)	(0.04%)
International Equity	15%	15%	(1.43%)	(4.28%)	0.43%	(0.06%)	0.38%
International Fixed Income	5%	5%	(7.24%)	(6.02%)	(0.08%)	0.01%	(0.07%)
Private Equity	4%	5%	(8.23%)	(8.23%)	0.00%	0.07%	0.07%
World Equity	16%	16%	(1.97%)	(0.87%)	(0.18%)	(0.03%)	(0.21%)
Cash & Equivalents	1%	1%	0.11%	0.05%	0.00%	0.01%	0.01%
<b>Total</b>			<b>0.85%</b>		<b>0.04%</b>	<b>1.03%</b>	<b>0.81%</b>

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

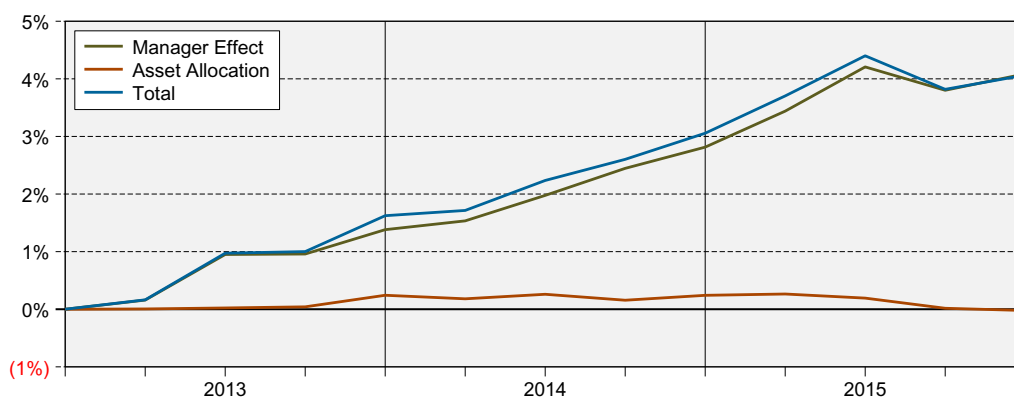
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Three Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Three Year Annualized Relative Attribution Effects

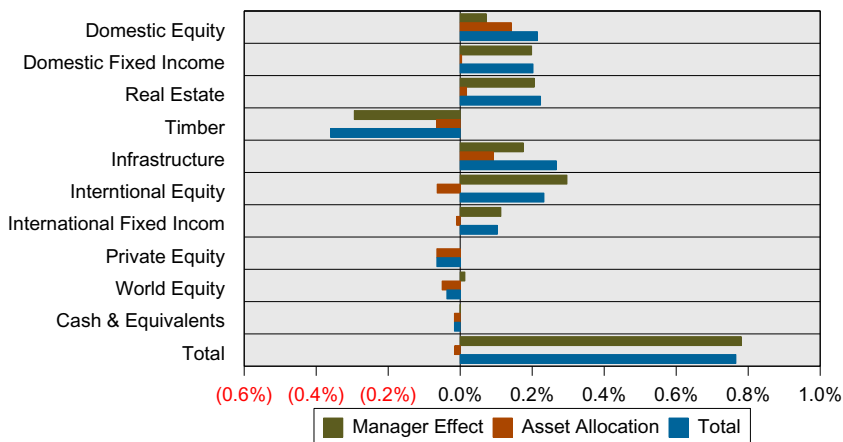
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	15.66%	14.31%	0.29%	0.12%	0.40%
Domestic Fixed Income	18%	17%	3.35%	1.55%	0.33%	(0.02%)	0.31%
Real Estate	10%	10%	14.90%	12.04%	0.25%	(0.03%)	0.23%
Timber	4%	5%	2.13%	8.35%	(0.29%)	(0.05%)	(0.34%)
Infrastructure	4%	5%	4.95%	0.72%	0.17%	0.06%	0.23%
International Equity	15%	15%	4.34%	2.15%	0.32%	(0.01%)	0.31%
International Fixed Income	5%	5%	(3.27%)	(4.07%)	0.04%	0.00%	0.04%
Private Equity	5%	5%	(0.27%)	(0.27%)	0.00%	0.02%	0.02%
World Equity	16%	16%	9.83%	9.63%	0.06%	(0.09%)	(0.03%)
Cash & Equivalents	1%	1%	0.07%	0.05%	0.00%	(0.00%)	(0.00%)
<b>Total</b>			<b>7.83%</b>	<b>6.65%</b>	<b>1.18%</b>	<b>(0.01%)</b>	<b>1.18%</b>

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

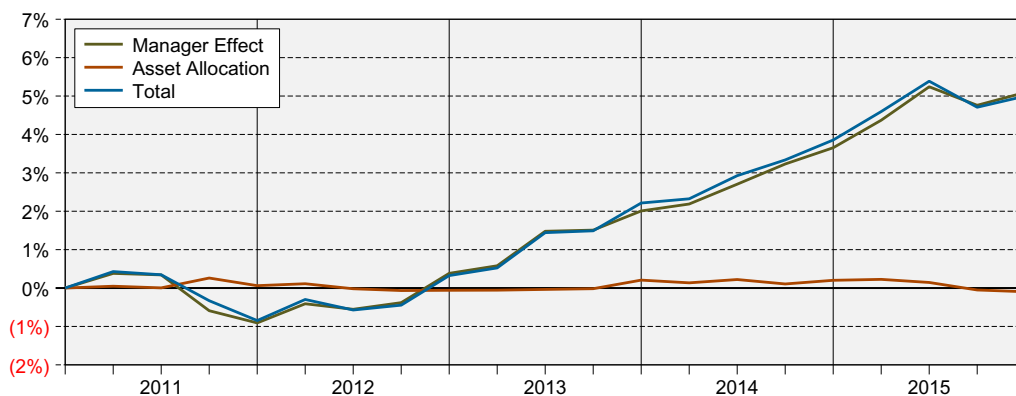
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Five Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Five Year Annualized Relative Attribution Effects

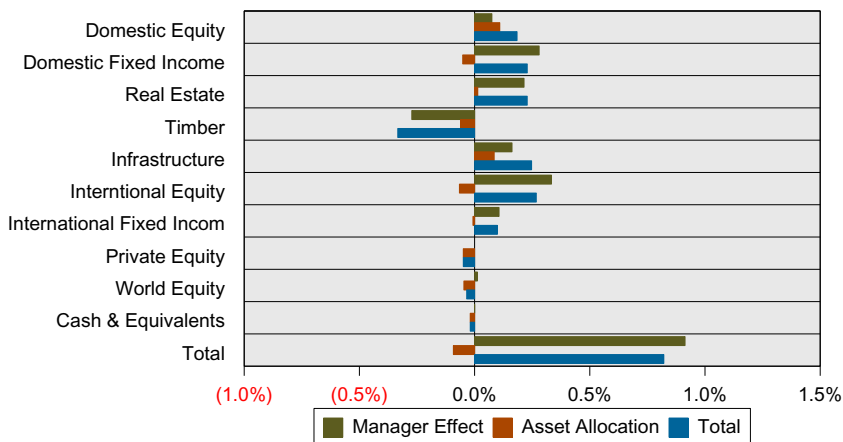
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	27%	26%	12.39%	11.81%	0.07%	0.14%	0.21%
Domestic Fixed Income	19%	19%	5.49%	4.01%	0.20%	0.00%	0.20%
Real Estate	9%	9%	14.86%	12.18%	0.21%	0.02%	0.22%
Timber	4%	4%	-	-	(0.29%)	(0.07%)	(0.36%)
Infrastructure	3%	4%	-	-	0.18%	0.09%	0.27%
International Equity	16%	16%	3.28%	1.34%	0.30%	(0.06%)	0.23%
International Fixed Income	5%	5%	1.25%	(0.83%)	0.11%	(0.01%)	0.10%
Private Equity	5%	5%	2.50%	2.50%	0.00%	(0.06%)	(0.06%)
World Equity	11%	11%	-	-	0.01%	(0.05%)	(0.04%)
Cash & Equivalents	1%	1%	0.08%	0.07%	0.00%	(0.02%)	(0.02%)
<b>Total</b>			<b>7.27%</b>	<b>6.50%</b>	<b>0.78%</b>	<b>(0.02%)</b>	<b>0.77%</b>

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

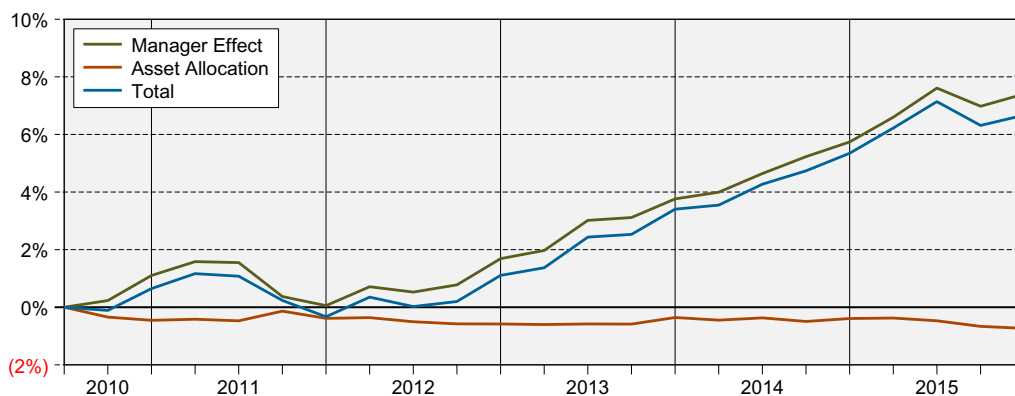
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Five and One-Half Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Five and One-Half Year Annualized Relative Attribution Effects

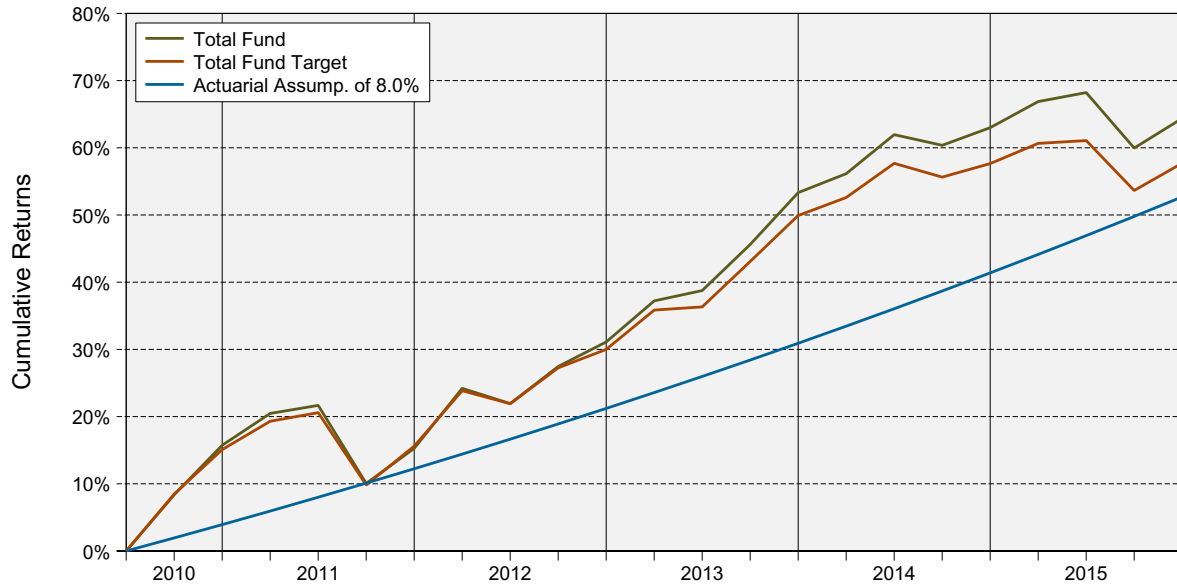
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	28%	27%	15.81%	15.23%	0.08%	0.11%	0.18%
Domestic Fixed Income	20%	20%	5.81%	4.13%	0.28%	(0.05%)	0.23%
Real Estate	9%	9%	15.65%	12.70%	0.21%	0.01%	0.23%
Timber	4%	4%	-	-	(0.27%)	(0.06%)	(0.33%)
Infrastructure	3%	4%	-	-	0.16%	0.09%	0.25%
International Equity	16%	16%	7.09%	4.88%	0.33%	(0.07%)	0.27%
International Fixed Income	5%	5%	2.84%	0.87%	0.11%	(0.01%)	0.10%
Private Equity	5%	5%	3.76%	3.76%	0.00%	(0.05%)	(0.05%)
World Equity	10%	10%	-	-	0.01%	(0.05%)	(0.03%)
Cash & Equivalents	1%	1%	0.09%	0.08%	0.00%	(0.02%)	(0.02%)
<b>Total</b>			<b>9.46%</b>	<b>8.64%</b>	<b>+ 0.91%</b>	<b>+ (0.09%)</b>	<b>0.82%</b>

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

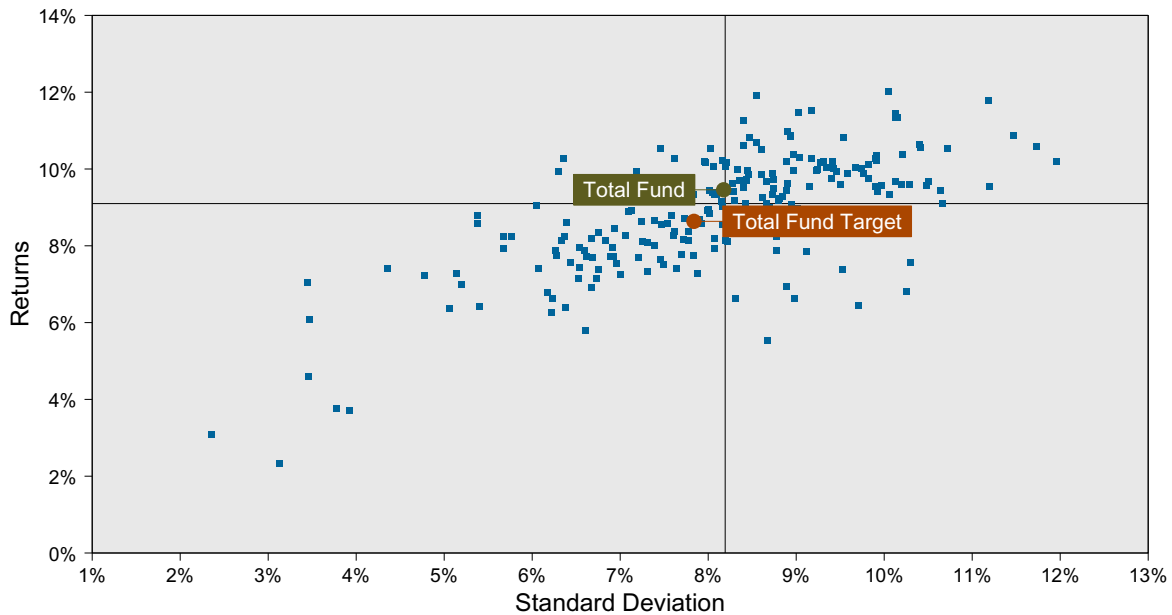
## Cumulative Performance Relative to Target

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the Public Fund Sponsor Database.

### Cumulative Returns Actual vs Target



### Five and One-Half Year Annualized Risk vs Return



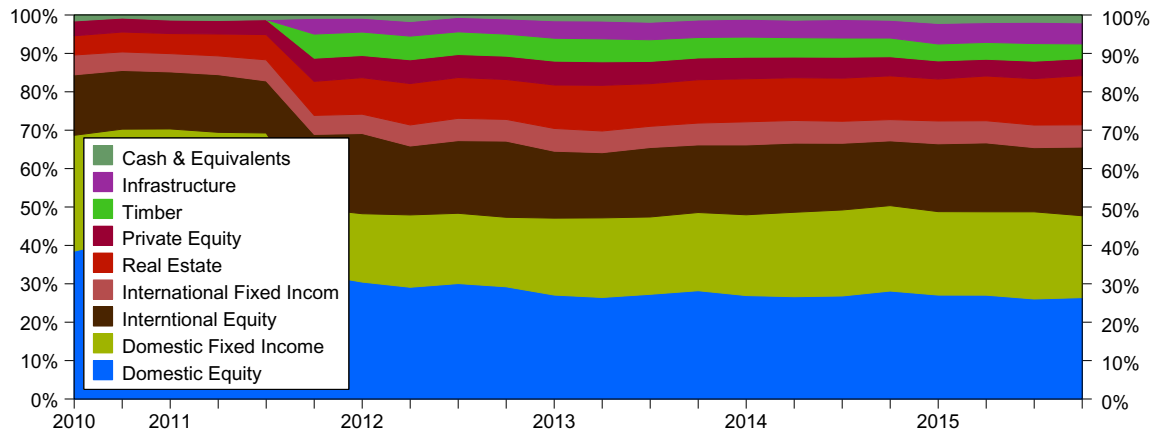
Squares represent membership of the Public Fund Sponsor Database

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

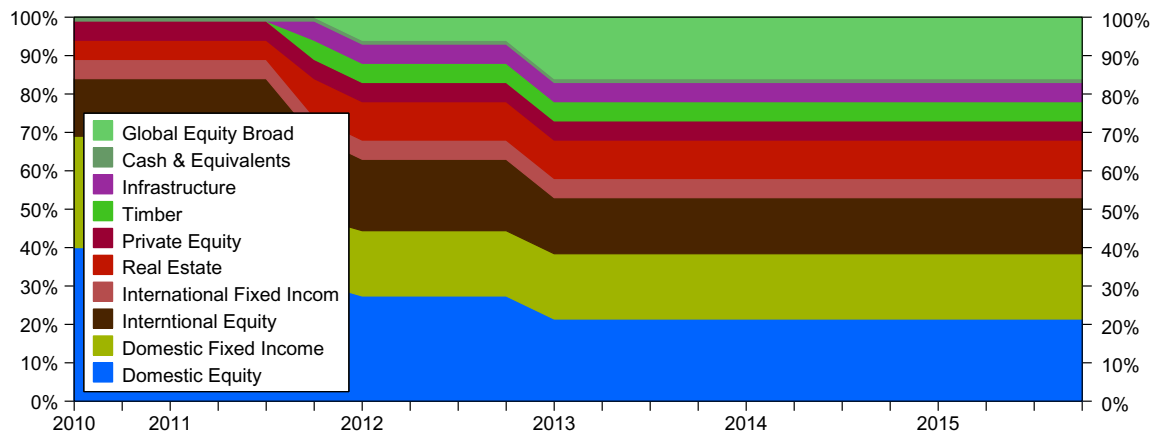
## Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Public Fund Sponsor Database.

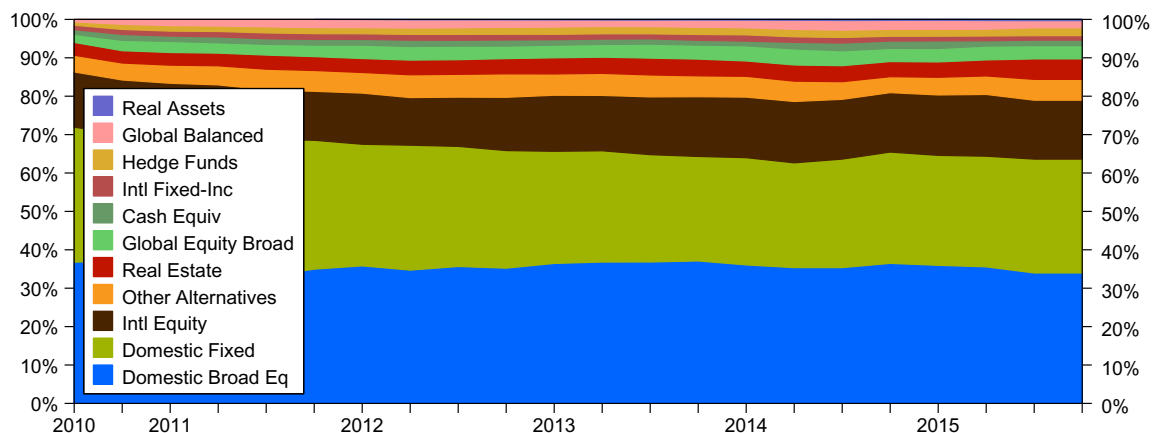
### Actual Historical Asset Allocation



### Target Historical Asset Allocation



### Average Public Fund Sponsor Database Historical Asset Allocation

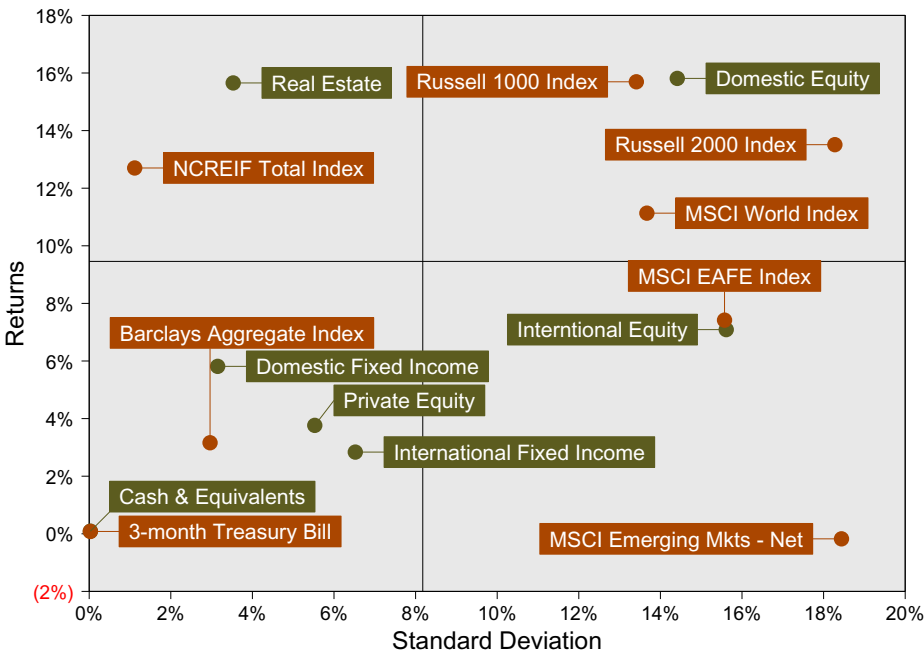


\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

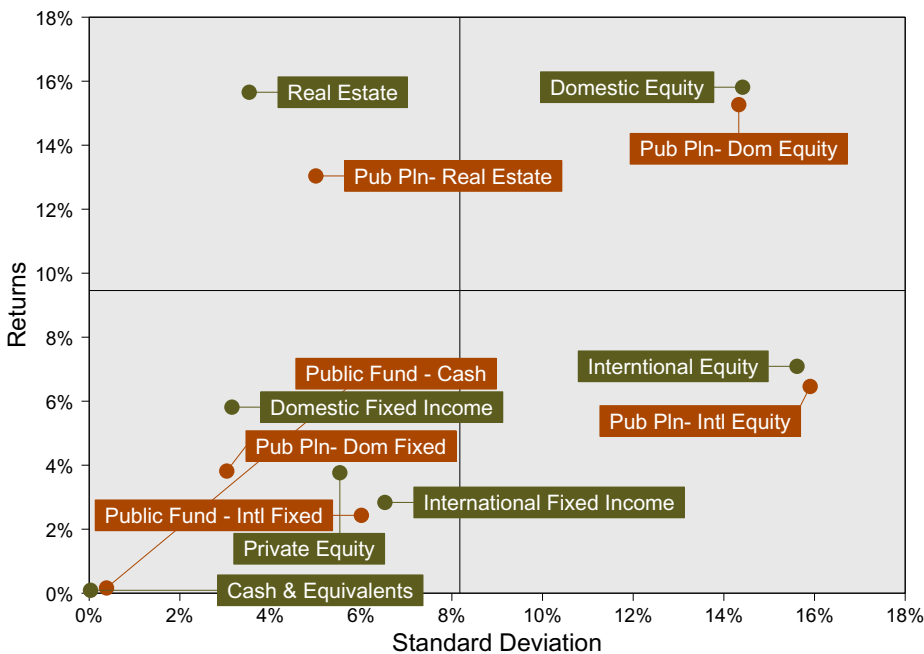
## Asset Class Risk and Return

The charts below show the five and one-half year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Five and One-Half Year Annualized Risk vs Return  
Asset Classes vs Benchmark Indices



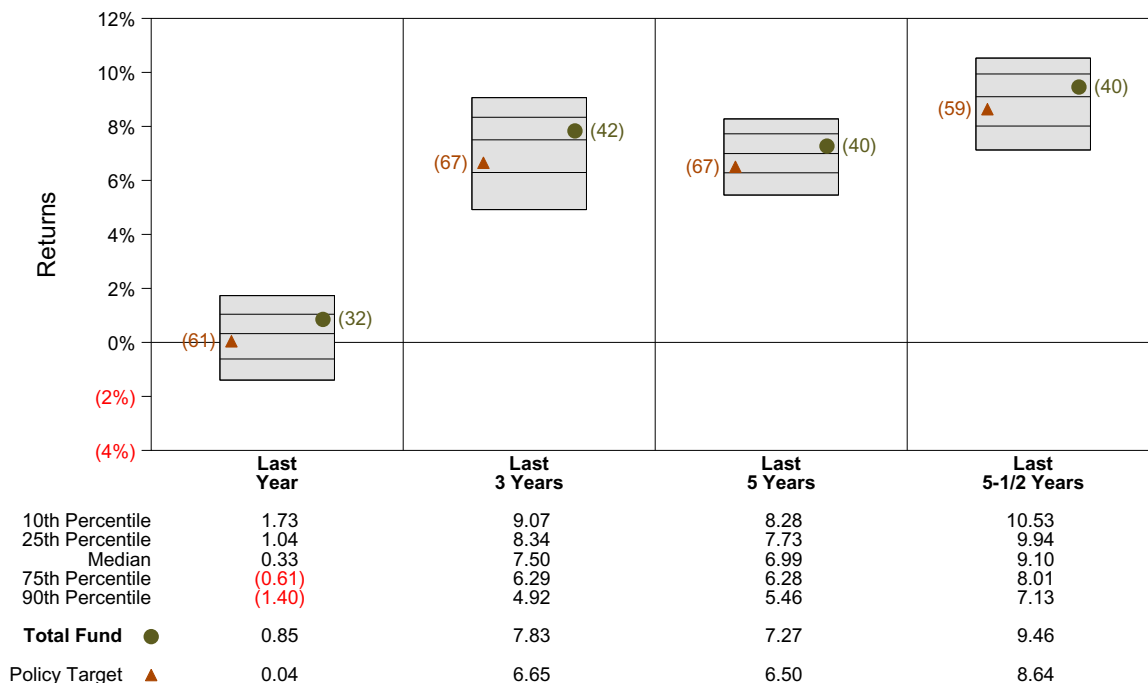
Five and One-Half Year Annualized Risk vs Return  
Asset Classes vs Asset Class Median



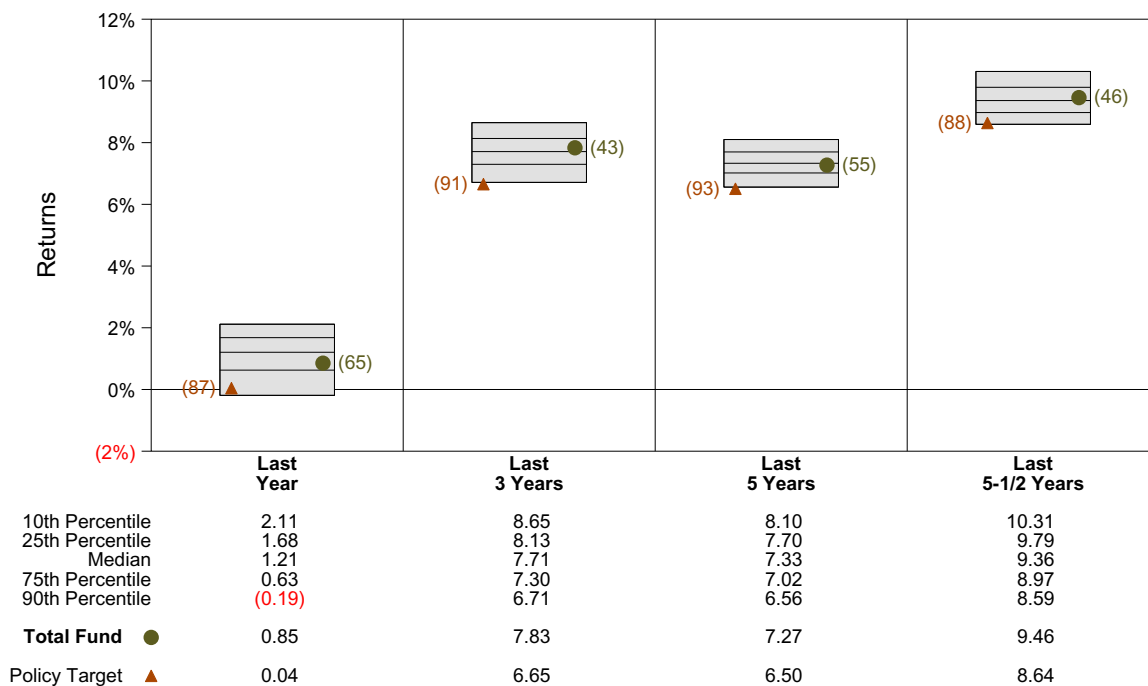
## Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the Public Fund Sponsor Database for periods ended December 31, 2015. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

### Public Fund Sponsor Database



### Asset Allocation Adjusted Ranking

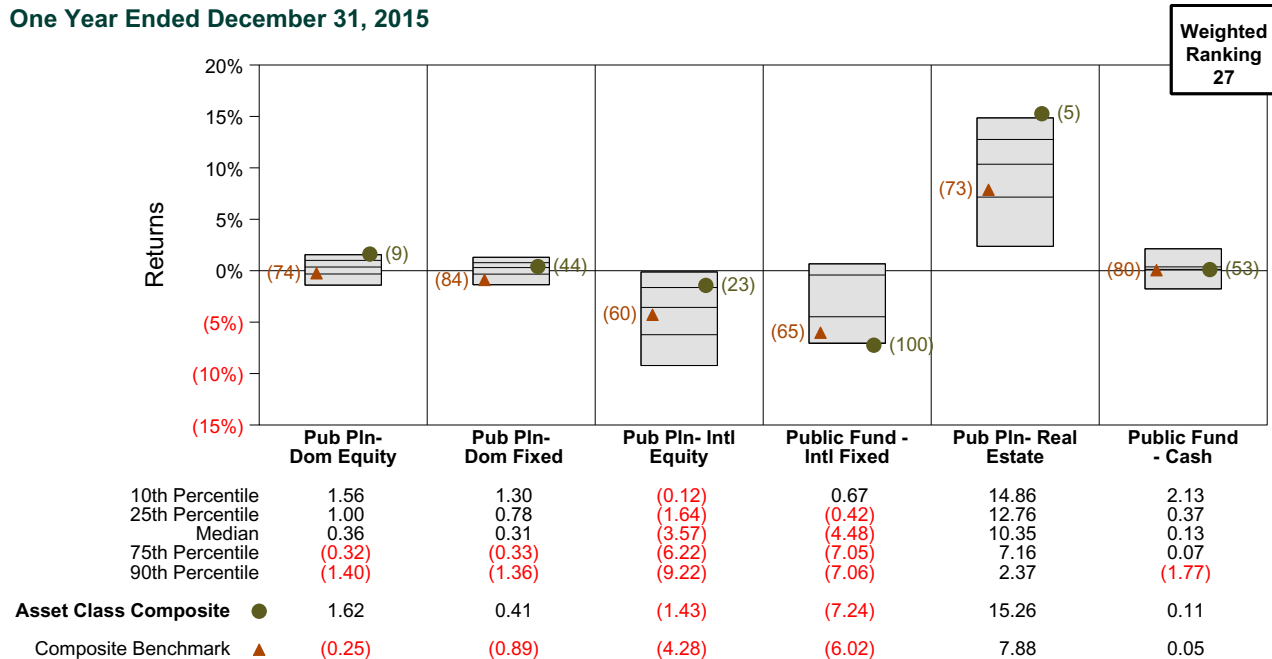


\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

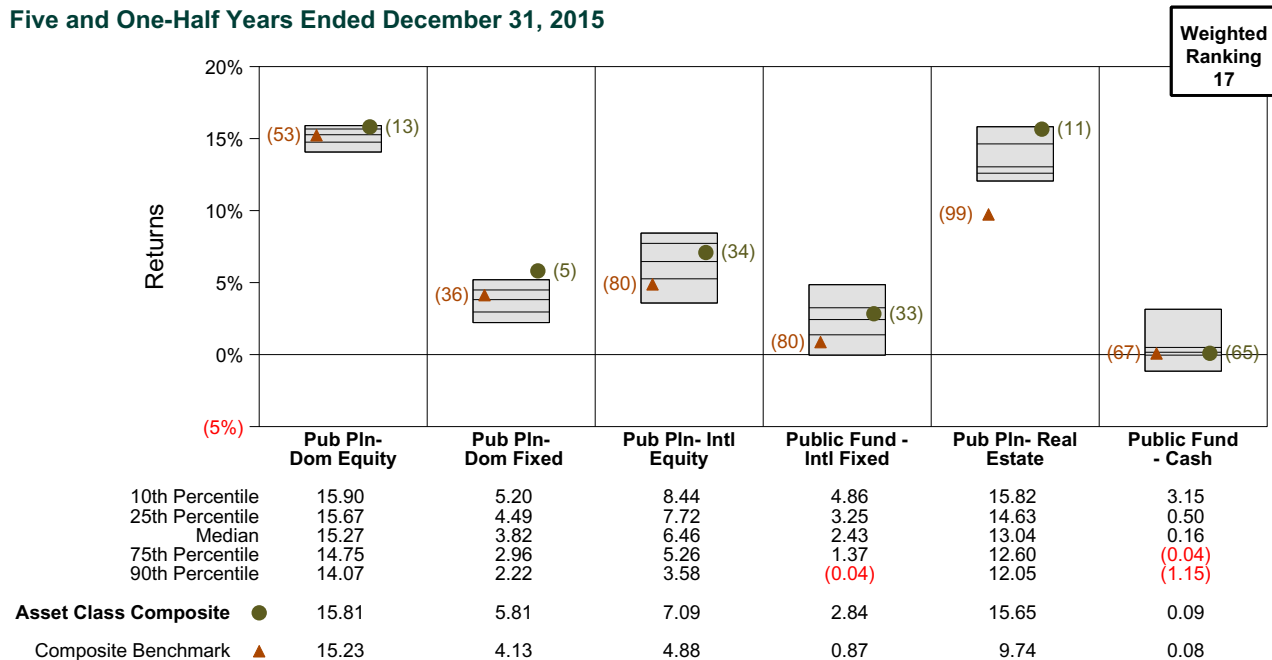
## Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

### Total Asset Class Performance One Year Ended December 31, 2015



### Total Asset Class Performance Five and One-Half Years Ended December 31, 2015



\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

## Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2015, with the distribution as of September 30, 2015. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Class Allocation

	December 31, 2015		September 30, 2015			
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
<b>GLOBAL EQUITY</b>	<b>\$1,351,198,545</b>	<b>56.98%</b>	<b>\$25,228,190</b>	<b>\$57,481,827</b>	<b>\$1,268,488,528</b>	<b>55.20%</b>
<b>Domestic Equity</b>	<b>\$525,260,988</b>	<b>22.15%</b>	<b>\$(13,237,329)</b>	<b>\$29,638,936</b>	<b>\$508,859,381</b>	<b>22.14%</b>
Large Cap	412,811,472	17.41%	(13,507,329)	25,996,914	400,321,887	17.42%
Small Cap	112,449,516	4.74%	270,000	3,642,022	108,537,494	4.72%
<b>International Equity</b>	<b>\$355,949,076</b>	<b>15.01%</b>	<b>\$14,667,471</b>	<b>\$14,776,492</b>	<b>\$326,505,113</b>	<b>14.21%</b>
Developed Intl Equity	269,424,507	11.36%	167,471	13,687,027	255,570,009	11.12%
Emerging Markets	86,524,569	3.65%	14,500,000	1,089,465	70,935,104	3.09%
<b>World Equity</b>	<b>\$381,945,890</b>	<b>16.11%</b>	<b>\$21,324,184</b>	<b>\$16,283,258</b>	<b>\$344,338,449</b>	<b>14.99%</b>
<b>Private Equity</b>	<b>\$88,042,590</b>	<b>3.71%</b>	<b>\$2,473,864</b>	<b>\$(3,216,859)</b>	<b>\$88,785,585</b>	<b>3.86%</b>
<b>GLOBAL FIXED INCOME</b>	<b>\$539,216,703</b>	<b>22.74%</b>	<b>\$(16,624,487)</b>	<b>\$(2,436,144)</b>	<b>\$558,277,333</b>	<b>24.30%</b>
<b>Domestic Fixed Income</b>	<b>\$424,167,902</b>	<b>17.89%</b>	<b>\$(17,645,904)</b>	<b>\$(1,513,991)</b>	<b>\$443,327,797</b>	<b>19.29%</b>
Inv. Grade Fixed Income	300,372,713	12.67%	(12,812,606)	345,969	312,839,350	13.61%
Below Inv. Grade Fixed Income	123,795,189	5.22%	(4,833,298)	(1,859,960)	130,488,447	5.68%
<b>International Fixed Income</b>	<b>\$115,048,801</b>	<b>4.85%</b>	<b>\$1,021,417</b>	<b>\$(922,153)</b>	<b>\$114,949,536</b>	<b>5.00%</b>
<b>GLOBAL REAL ASSETS</b>	<b>\$440,280,569</b>	<b>18.57%</b>	<b>\$(2,558,424)</b>	<b>\$8,386,169</b>	<b>\$434,452,823</b>	<b>18.91%</b>
Real Estate	254,893,045	10.75%	12,272,745	6,455,380	236,164,921	10.28%
Timber	76,247,493	3.22%	(15,153,602)	1,793,357	89,607,737	3.90%
Infrastructure	109,140,031	4.60%	322,433	137,432	108,680,166	4.73%
<b>Cash &amp; Equivalents</b>	<b>\$40,723,495</b>	<b>1.72%</b>	<b>\$4,048,801</b>	<b>\$12,191</b>	<b>\$36,662,503</b>	<b>1.60%</b>
<b>Securities Lending Income</b>	<b>\$0</b>	<b>0.00%</b>	<b>\$(79,087)</b>	<b>\$79,087</b>	<b>-</b>	<b>-</b>
<b>Total Fund</b>	<b>\$2,371,419,311</b>	<b>100.0%</b>	<b>\$10,014,993</b>	<b>\$63,523,131</b>	<b>\$2,297,881,187</b>	<b>100.0%</b>

PLEASE REFER TO PAGES 36-38 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 5-1/2 Years
<b>Global Equity</b>					
Gross	4.54%	(0.93%)	9.80%	-	-
Net	4.50%	(1.26%)	9.43%	-	-
Wtd Avg Global Equity Benchmark	4.37%	(2.13%)	8.55%	-	-
<b>Domestic Equity</b>					
Gross	5.84%	1.62%	15.66%	12.39%	15.81%
Net	5.81%	1.46%	15.45%	12.14%	15.55%
Wtd Avg Domestci Equity Benchmark	5.86%	(0.25%)	14.31%	11.81%	15.23%
<b>Large Cap Equity</b>					
Gross	6.53%	3.49%	16.73%	13.10%	16.34%
Net	6.51%	3.34%	16.54%	12.85%	16.07%
Benchmark(1)	6.50%	0.92%	15.01%	12.58%	15.69%
<b>Small Cap Equity</b>					
Gross	3.36%	(4.71%)	11.99%	10.07%	13.98%
Net	3.36%	(4.90%)	11.74%	9.82%	13.73%
Russell 2000 Index	3.59%	(4.41%)	11.65%	9.19%	13.51%
<b>International Equity</b>					
Gross	4.57%	(1.43%)	4.34%	3.28%	7.09%
Net	4.52%	(1.62%)	4.08%	2.96%	6.75%
Wtd Avg Intl Equity Benchmark	3.73%	(4.28%)	2.15%	1.34%	4.88%
<b>Developed Intl Equity</b>					
Gross	5.36%	1.77%	6.98%	4.53%	8.38%
Net	5.29%	1.52%	6.71%	4.22%	8.06%
Benchmark(2)	4.71%	(0.81%)	5.01%	3.37%	6.38%
<b>Emerging Markets</b>					
Gross	2.04%	(11.43%)	(4.35%)	(1.29%)	2.61%
Net	2.04%	(11.43%)	(4.56%)	(1.62%)	2.25%
Benchmark(3)	0.66%	(14.92%)	(6.76%)	(4.77%)	(0.12%)
<b>World Equity</b>					
Gross	4.83%	(1.97%)	9.83%	-	-
Net	4.75%	(2.73%)	9.02%	-	-
MSCI World Index	5.50%	(0.87%)	9.63%	7.59%	11.13%
<b>Private Equity</b>					
Net	(3.57%)	(8.24%)	(0.30%)	2.42%	3.67%

(1) S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.

(2) 50% Hedged EAFE through 3/31/2011 and MSCI EAFE thereafter.

(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

PLEASE REFER TO PAGES 39-43 FOR INVESTMENT MANAGER LEVEL RETURNS.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 5-1/2 Years
<b>Global Fixed Income</b>					
Gross	(0.50%)	(1.21%)	1.91%	-	-
Net	(0.55%)	(1.44%)	1.67%	-	-
Wtd Avg Global Fixed Income Benchmark	(1.06%)	(2.05%)	0.28%	-	-
<b>Domestic Fixed Income</b>					
Gross	(0.41%)	0.41%	3.35%	5.49%	5.81%
Net	(0.45%)	0.21%	3.14%	5.25%	5.56%
Wtd Avg Domestic FI Benchmark	(0.99%)	(0.89%)	1.55%	4.01%	4.13%
<b>Inv. Grade Fixed Income</b>					
Gross	0.12%	1.75%	3.21%	4.88%	5.08%
Net	0.11%	1.65%	3.10%	4.72%	4.90%
Barclays Aggregate Index	(0.57%)	0.55%	1.44%	3.25%	3.16%
<b>Below Inv. Grade Fixed Income</b>					
Gross	(1.65%)	(2.72%)	3.70%	6.78%	7.94%
Net	(1.75%)	(3.13%)	3.24%	6.34%	7.50%
Barclays HY Corp 2% Issue	(2.06%)	(4.43%)	1.70%	5.03%	6.40%
<b>International Fixed Income</b>					
Gross	(0.80%)	(7.24%)	(3.27%)	1.25%	2.84%
Net	(0.89%)	(7.58%)	(3.62%)	0.88%	2.47%
Wtd Avg Intl Fixed Income Benchmark	(1.26%)	(6.02%)	(4.07%)	(0.83%)	0.87%
<b>Global Real Assets</b>					
Gross	1.90%	9.42%	9.34%	-	-
Net	1.80%	8.95%	8.91%	-	-
Wtd Avg Global Real Assets Benchmark	1.72%	7.90%	8.23%	-	-
<b>Real Estate</b>					
Gross	2.54%	15.26%	14.90%	14.86%	15.65%
Net	2.42%	14.64%	14.34%	14.30%	15.08%
NCREIF Total Index	2.91%	13.33%	12.04%	12.18%	12.70%
<b>Timber</b>					
Net	2.01%	5.68%	2.13%	-	-
NCREIF Timberland Index	1.86%	4.97%	8.35%	6.84%	6.03%
<b>Infrastructure</b>					
Gross	0.13%	(0.02%)	4.95%	-	-
Net	(0.02%)	(0.53%)	4.34%	-	-
CPI-W	(0.80%)	0.38%	0.72%	1.40%	1.40%
<b>Cash &amp; Equivalents - Net</b>	<b>0.04%</b>	<b>0.11%</b>	<b>0.07%</b>	<b>0.08%</b>	<b>0.09%</b>
3-month Treasury Bill	0.03%	0.05%	0.05%	0.07%	0.08%
<b>Total Fund</b>					
Gross	2.77%	0.85%	7.83%	7.27%	9.46%
Net	2.71%	0.53%	7.49%	6.92%	9.10%
Target*	2.65%	0.04%	6.65%	6.50%	8.64%

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

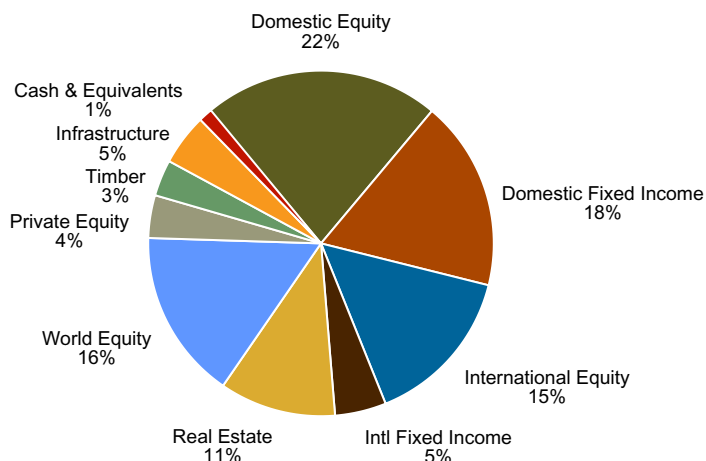
PLEASE REFER TO PAGES 39-43 FOR INVESTMENT MANAGER LEVEL RETURNS.



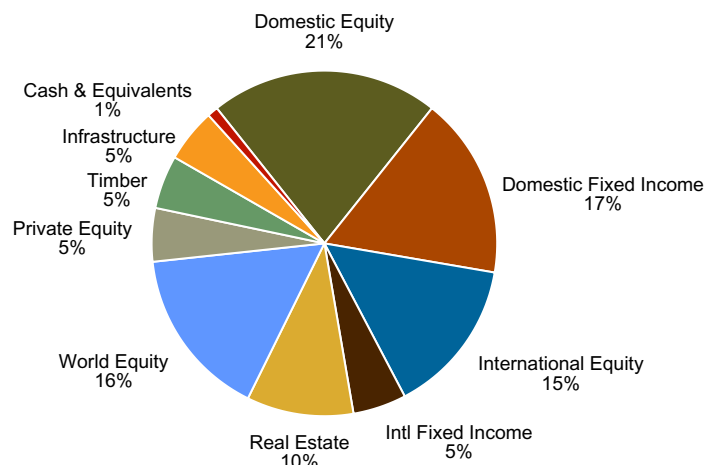
## Actual vs Target Asset Allocation As of December 31, 2015

The top left chart shows the Fund's asset allocation as of December 31, 2015. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Public Fund Sponsor Database.

**Actual Asset Allocation**

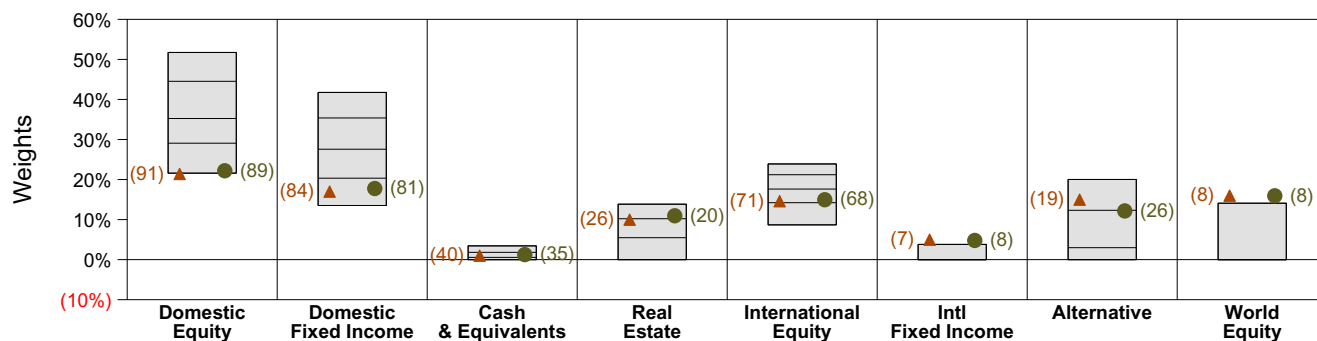


**Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	451,887	22.2%	21.4%	0.8%	16,128
Domestic Fixed Income	361,670	17.8%	17.0%	0.8%	15,506
International Equity	304,547	15.0%	14.6%	0.4%	7,253
Intl Fixed Income	97,532	4.8%	5.0%	(0.2%)	(4,281)
Real Estate	222,901	10.9%	10.0%	0.9%	19,275
World Equity	324,514	15.9%	16.0%	(0.1%)	(1,287)
Private Equity	80,813	4.0%	5.0%	(1.0%)	(21,000)
Timber	69,159	3.4%	5.0%	(1.6%)	(32,654)
Infrastructure	97,718	4.8%	5.0%	(0.2%)	(4,095)
Cash & Equivalents	25,519	1.3%	1.0%	0.3%	5,156
Total	2,036,260	100.0%	100.0%		

### Asset Class Weights vs Public Fund Sponsor Database



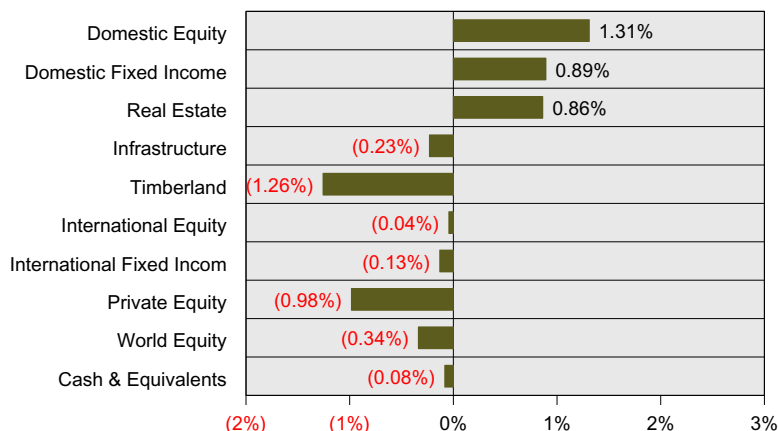
10th Percentile	51.74	41.76	3.44	13.85	23.89	3.81	20.02	14.09
25th Percentile	44.53	35.38	1.82	10.21	21.21	0.00	12.32	0.00
Median	35.24	27.57	0.56	5.47	17.62	0.00	2.99	0.00
75th Percentile	29.08	20.34	0.00	0.00	14.22	0.00	0.00	0.00
90th Percentile	21.59	13.52	0.00	0.00	8.68	0.00	0.00	0.00
<b>Fund</b>	<b>22.19</b>	<b>17.76</b>	<b>1.25</b>	<b>10.95</b>	<b>14.96</b>	<b>4.79</b>	<b>12.16</b>	<b>15.94</b>
<b>Target</b>	<b>21.40</b>	<b>17.00</b>	<b>1.00</b>	<b>10.00</b>	<b>14.60</b>	<b>5.00</b>	<b>15.00</b>	<b>16.00</b>
% Group Invested	97.45%	97.45%	70.92%	61.22%	90.82%	17.86%	46.43%	21.43%

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

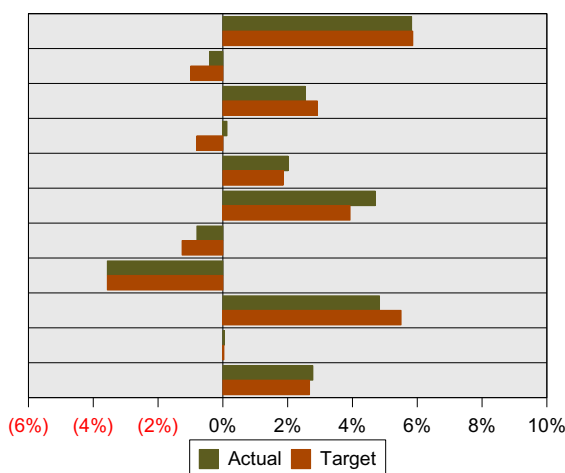
## Quarterly Total Fund Relative Attribution - December 31, 2015

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

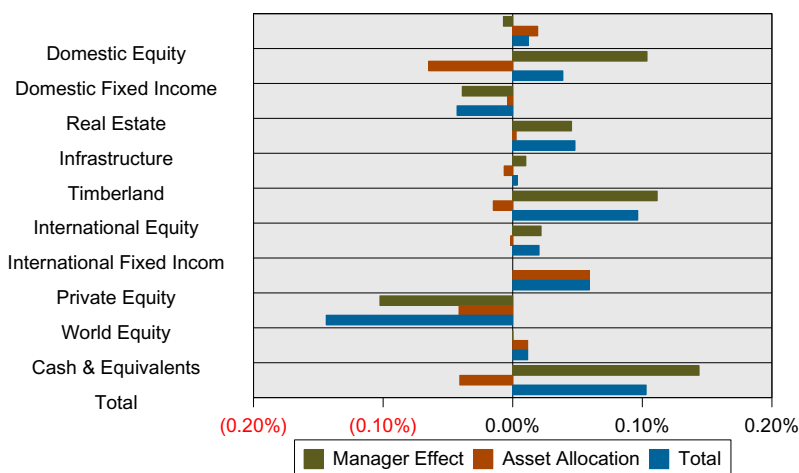
### Asset Class Under or Overweighting



### Actual vs Target Returns



### Relative Attribution by Asset Class



### Relative Attribution Effects for Quarter ended December 31, 2015

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	5.83%	5.86%	(0.01%)	0.02%	0.01%
Domestic Fixed Income	18%	17%	(0.41%)	(0.99%)	0.10%	(0.06%)	0.04%
Real Estate	11%	10%	2.54%	2.91%	(0.04%)	(0.00%)	(0.04%)
Infrastructure	5%	5%	0.13%	(0.80%)	0.05%	0.00%	0.05%
Timberland	4%	5%	2.01%	1.86%	0.01%	(0.01%)	0.00%
International Equity	15%	15%	4.70%	3.93%	0.11%	(0.02%)	0.10%
International Fixed Income	5%	5%	(0.80%)	(1.26%)	0.02%	(0.00%)	0.02%
Private Equity	4%	5%	(3.57%)	(3.57%)	0.00%	0.06%	0.06%
World Equity	16%	16%	4.83%	5.50%	(0.10%)	(0.04%)	(0.14%)
Cash & Equivalents	1%	1%	0.04%	0.03%	0.00%	0.01%	0.01%

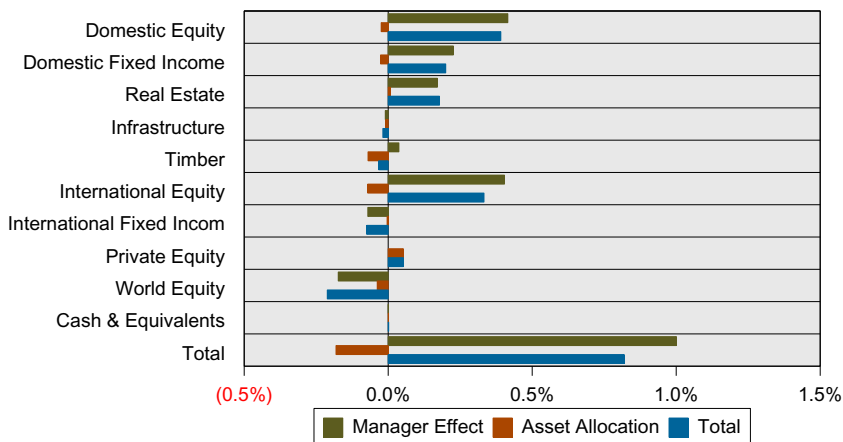
**Total** **2.78% = 2.67% + 0.14% + (0.04%)** **0.10%**

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

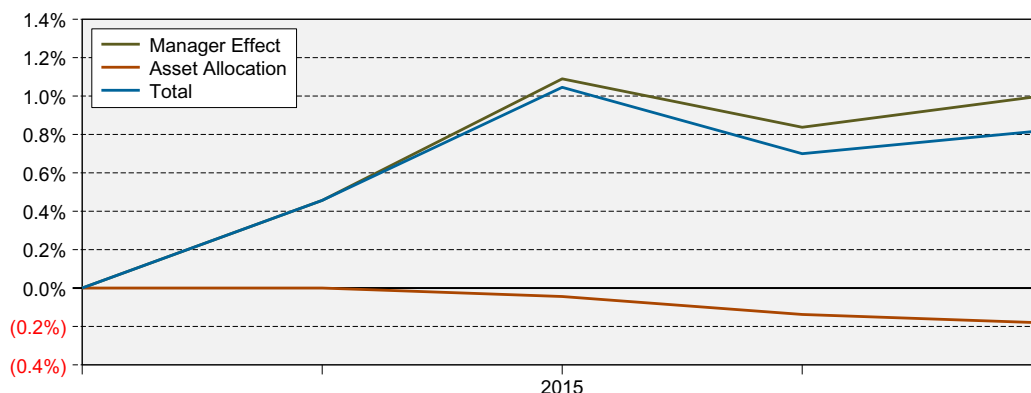
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

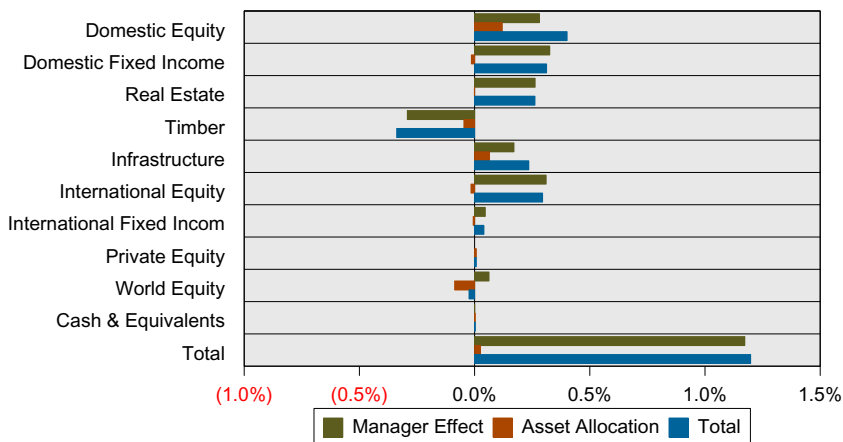
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	22%	21%	1.61%	(0.25%)	0.42%	(0.02%)	0.39%
Domestic Fixed Income	18%	17%	0.39%	(0.89%)	0.23%	(0.03%)	0.20%
Real Estate	10%	10%	15.26%	13.33%	0.17%	0.01%	0.18%
Infrastructure	5%	5%	(0.02%)	0.38%	(0.01%)	(0.01%)	(0.02%)
Timber	4%	5%	5.70%	4.97%	0.04%	(0.07%)	(0.03%)
International Equity	15%	15%	(0.94%)	(3.59%)	0.40%	(0.07%)	0.33%
International Fixed Income	5%	5%	(7.24%)	(6.02%)	(0.07%)	(0.00%)	(0.07%)
Private Equity	4%	5%	(8.23%)	(8.23%)	0.00%	0.05%	0.05%
World Equity	16%	16%	(1.97%)	(0.87%)	(0.17%)	(0.04%)	(0.21%)
Cash & Equivalents	1%	1%	0.11%	0.05%	0.00%	0.00%	0.00%
<b>Total</b>			<b>0.96%</b>	<b>0.14%</b>	<b>1.00%</b>	<b>(0.18%)</b>	<b>0.82%</b>

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

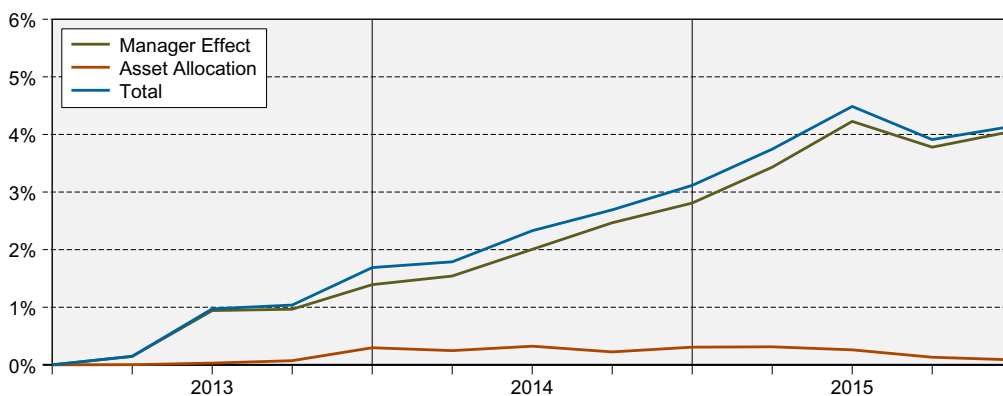
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Three Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Three Year Annualized Relative Attribution Effects

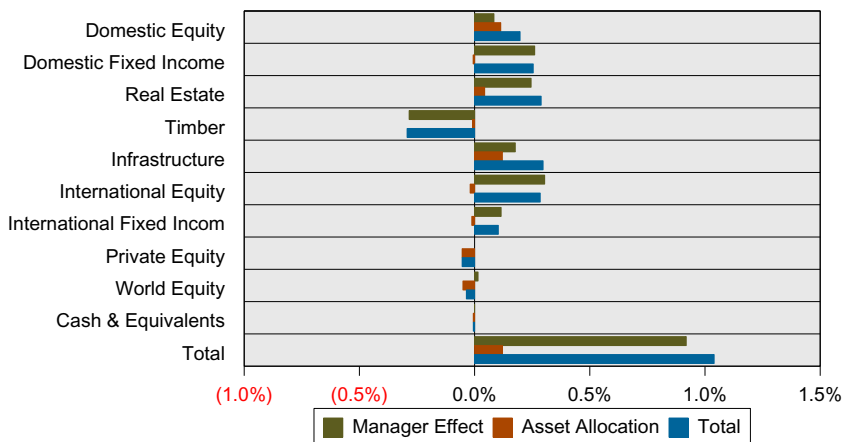
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	15.66%	14.31%	0.28%	0.12%	0.40%
Domestic Fixed Income	18%	17%	3.34%	1.55%	0.33%	(0.01%)	0.31%
Real Estate	10%	10%	14.90%	12.04%	0.26%	(0.00%)	0.26%
Timber	4%	5%	2.14%	8.35%	(0.29%)	(0.05%)	(0.34%)
Infrastructure	4%	5%	4.95%	0.72%	0.17%	0.06%	0.24%
International Equity	15%	15%	4.81%	2.72%	0.31%	(0.02%)	0.30%
International Fixed Income	5%	5%	(3.27%)	(4.07%)	0.05%	(0.01%)	0.04%
Private Equity	5%	5%	(0.25%)	(0.25%)	0.00%	0.01%	0.01%
World Equity	16%	16%	9.83%	9.63%	0.06%	(0.09%)	(0.02%)
Cash & Equivalents	1%	1%	0.07%	0.05%	0.00%	0.00%	0.00%
<b>Total</b>			<b>7.94%</b>	<b>6.74%</b>	<b>1.17%</b>	<b>0.03%</b>	<b>1.20%</b>

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

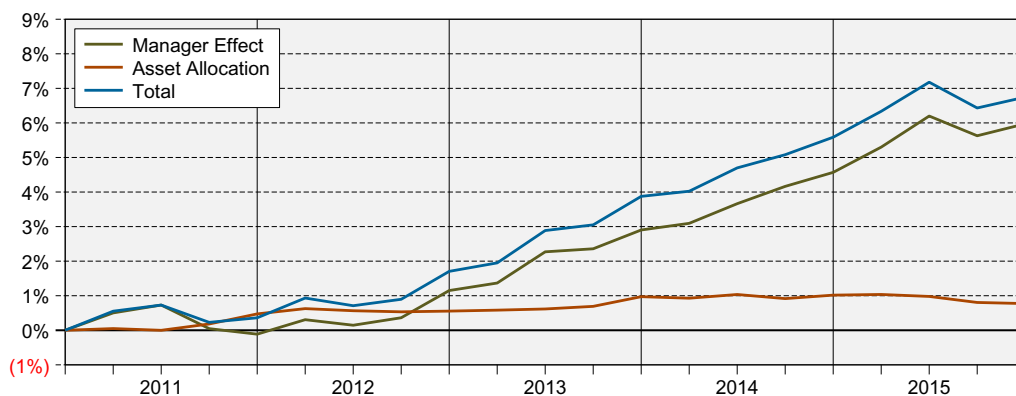
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Five Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Five Year Annualized Relative Attribution Effects

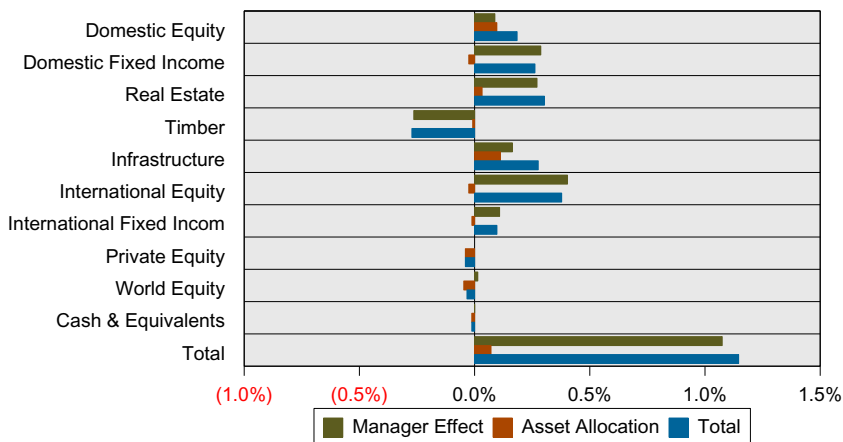
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	27%	26%	12.38%	11.78%	0.08%	0.11%	0.20%
Domestic Fixed Income	18%	17%	5.25%	3.69%	0.26%	(0.01%)	0.25%
Real Estate	10%	10%	14.85%	12.18%	0.25%	0.04%	0.29%
Timber	4%	4%	-	-	(0.28%)	(0.01%)	(0.29%)
Infrastructure	3%	4%	-	-	0.18%	0.12%	0.30%
International Equity	17%	17%	3.56%	1.82%	0.30%	(0.02%)	0.28%
International Fixed Income	5%	5%	1.25%	(0.83%)	0.12%	(0.01%)	0.10%
Private Equity	5%	5%	2.54%	2.54%	0.00%	(0.05%)	(0.05%)
World Equity	11%	11%	-	-	0.01%	(0.05%)	(0.04%)
Cash & Equivalents	1%	1%	0.08%	0.07%	0.00%	(0.01%)	(0.01%)
<b>Total</b>			<b>7.25%</b>	<b>6.21%</b>	<b>0.92%</b>	<b>0.12%</b>	<b>1.04%</b>

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

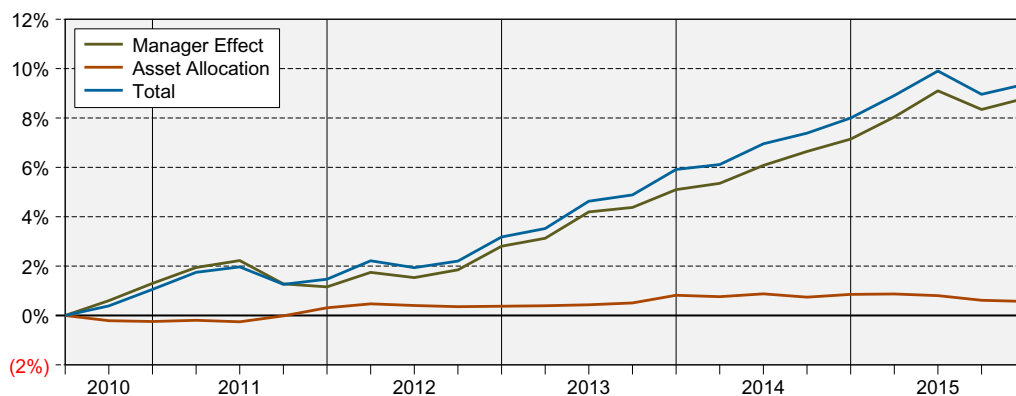
## Cumulative Total Fund Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Five and One-Half Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Five and One-Half Year Annualized Relative Attribution Effects

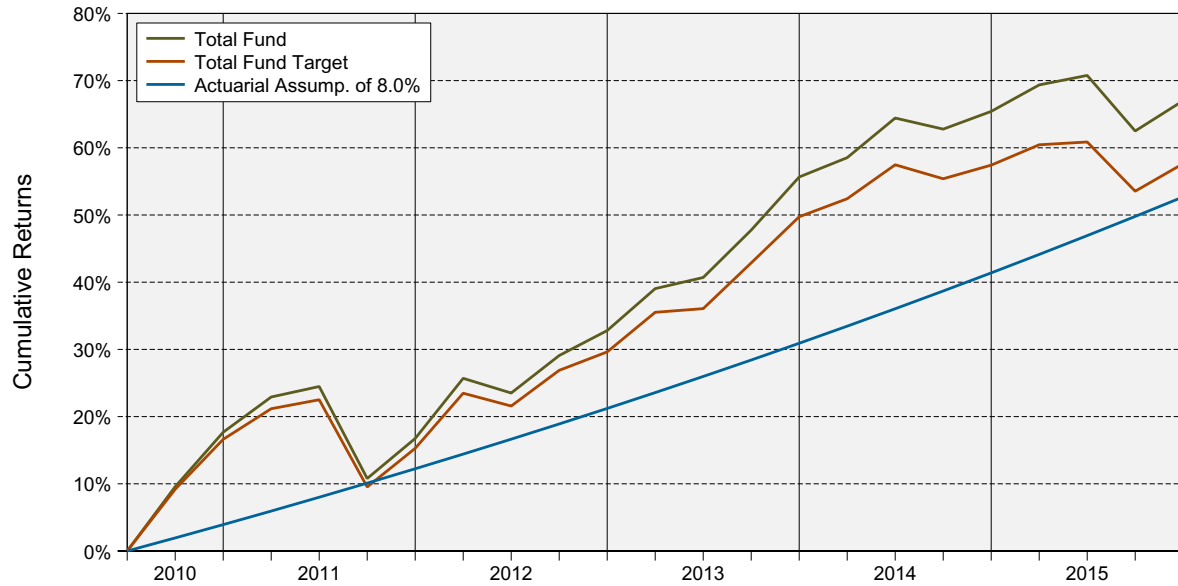
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	28%	27%	15.82%	15.22%	0.09%	0.10%	0.18%
Domestic Fixed Income	18%	17%	5.83%	4.16%	0.29%	(0.03%)	0.26%
Real Estate	10%	10%	15.65%	12.70%	0.27%	0.03%	0.30%
Timber	4%	4%	-	-	(0.26%)	(0.01%)	(0.27%)
Infrastructure	3%	4%	-	-	0.16%	0.11%	0.28%
International Equity	18%	18%	7.33%	5.19%	0.40%	(0.03%)	0.38%
International Fixed Income	5%	5%	2.84%	0.87%	0.11%	(0.01%)	0.10%
Private Equity	5%	5%	3.79%	3.79%	0.00%	(0.04%)	(0.04%)
World Equity	10%	10%	-	-	0.01%	(0.05%)	(0.03%)
Cash & Equivalents	1%	1%	0.09%	0.08%	0.00%	(0.01%)	(0.01%)
<b>Total</b>			<b>9.77%</b>	<b>8.63%</b>	<b>1.07%</b>	<b>0.07%</b>	<b>1.15%</b>

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

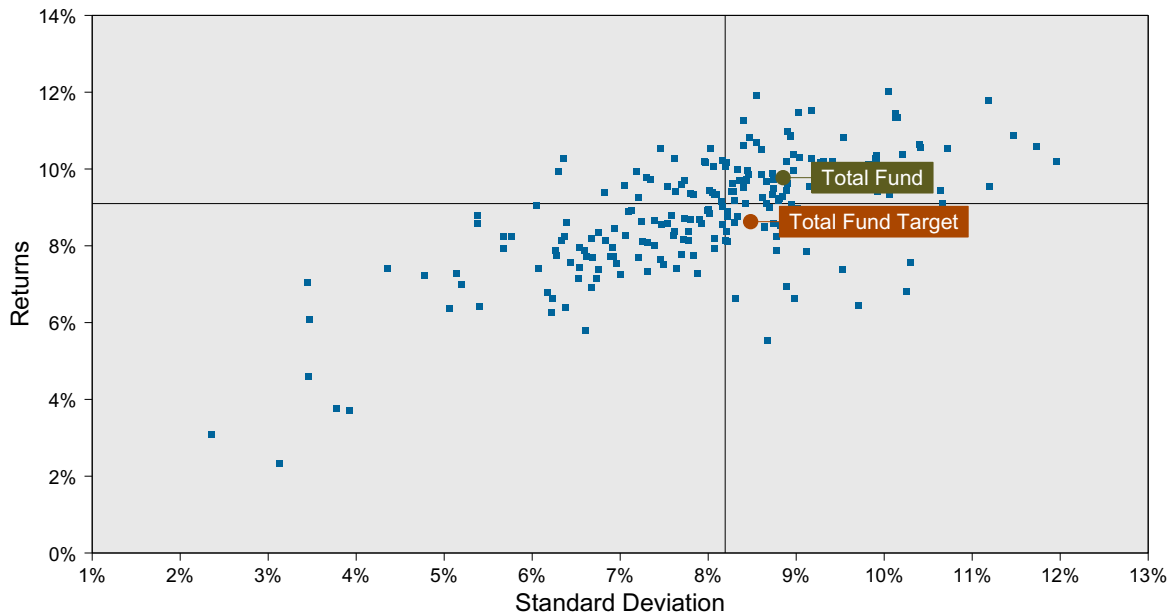
## Cumulative Performance Relative to Target

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the Public Fund Sponsor Database.

### Cumulative Returns Actual vs Target



### Five and One-Half Year Annualized Risk vs Return



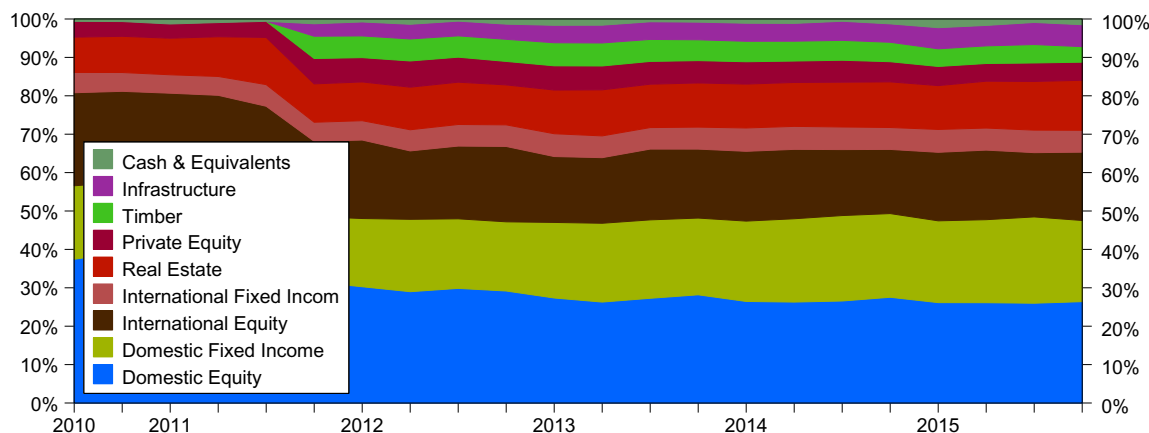
Squares represent membership of the Public Fund Sponsor Database

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

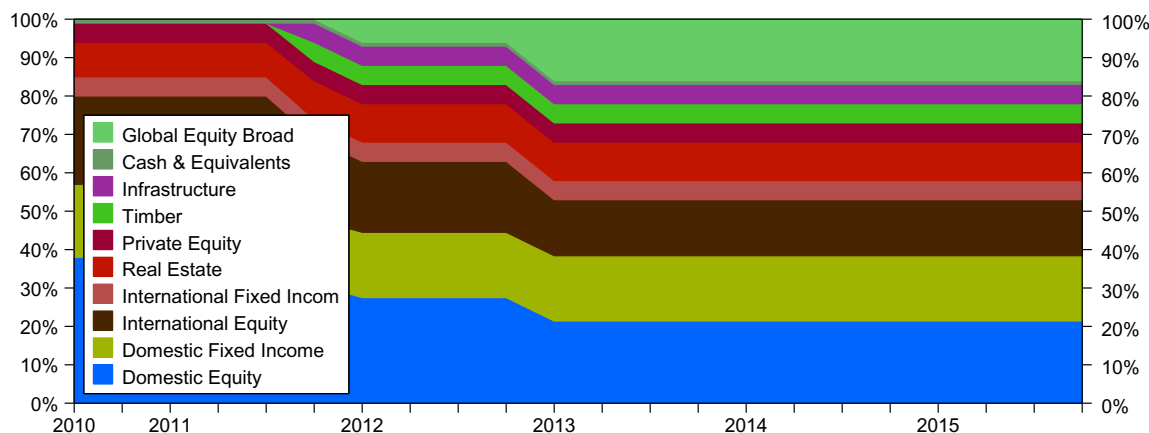
## Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Public Fund Sponsor Database.

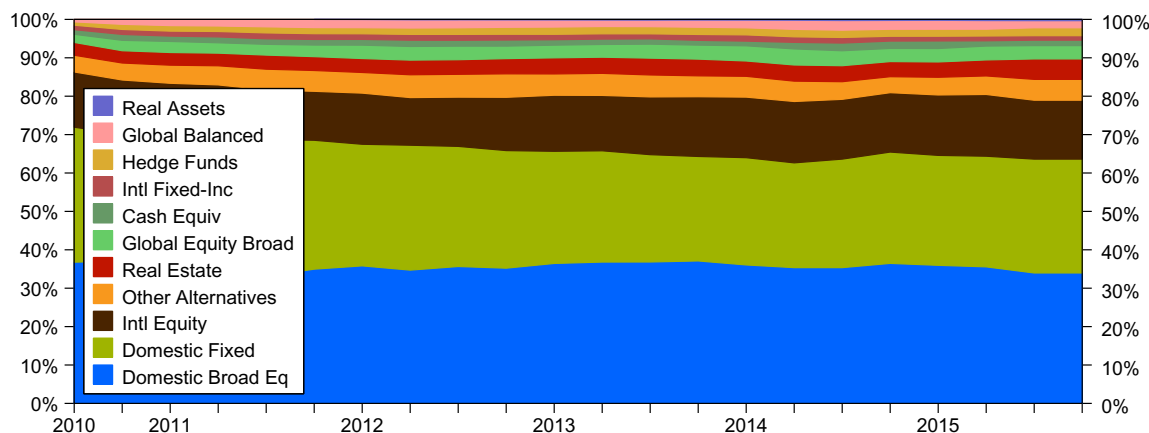
### Actual Historical Asset Allocation



### Target Historical Asset Allocation



### Average Public Fund Sponsor Database Historical Asset Allocation

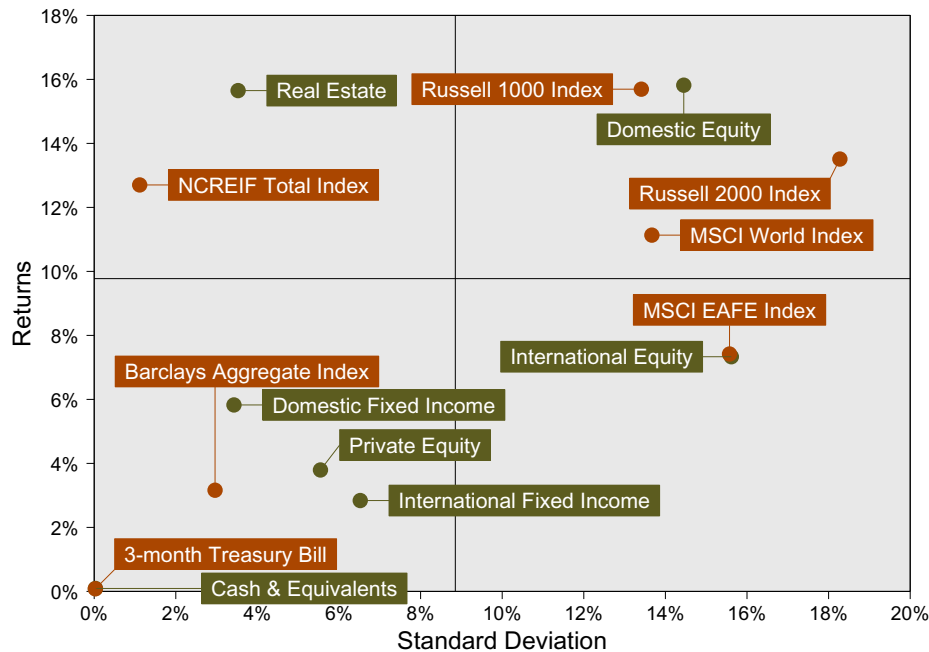


\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

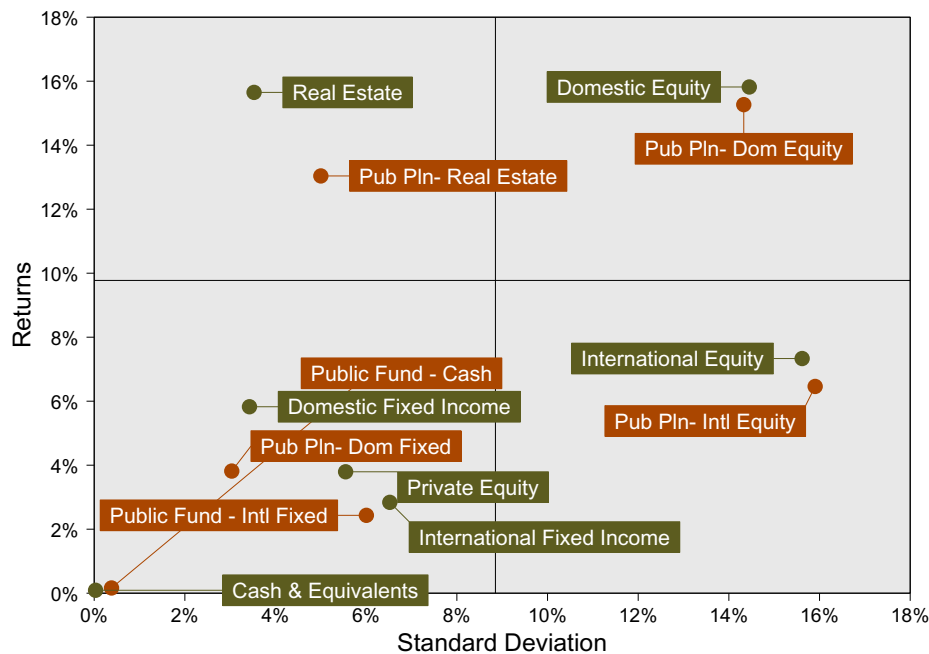
## Asset Class Risk and Return

The charts below show the five and one-half year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Five and One-Half Year Annualized Risk vs Return  
Asset Classes vs Benchmark Indices



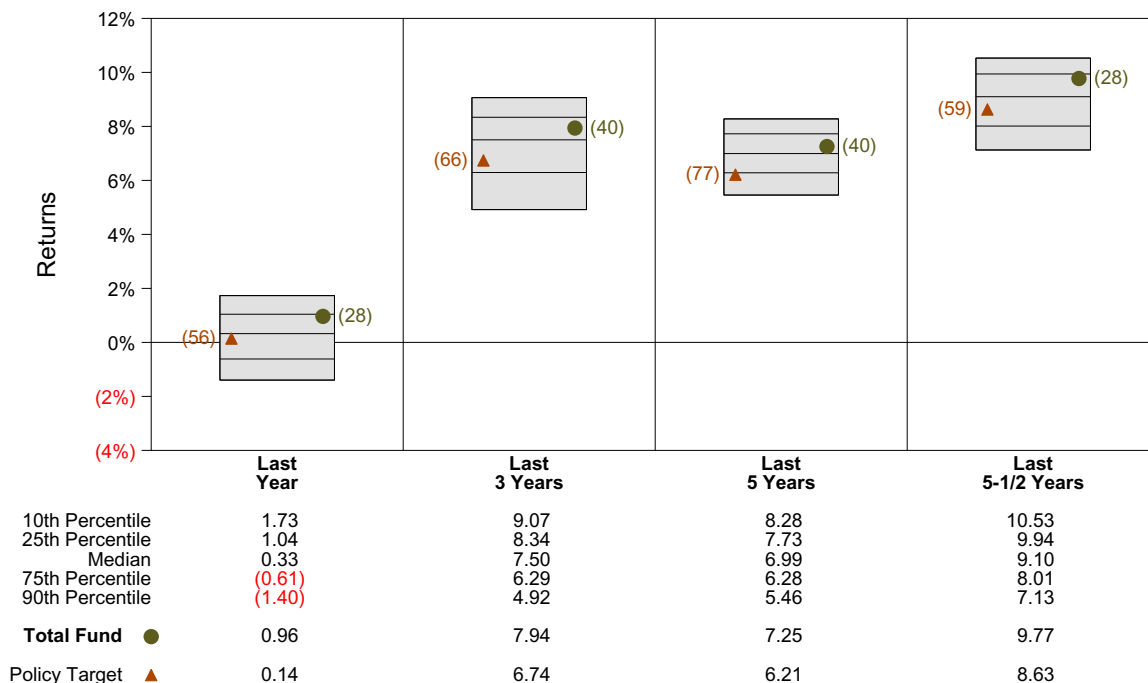
Five and One-Half Year Annualized Risk vs Return  
Asset Classes vs Asset Class Median



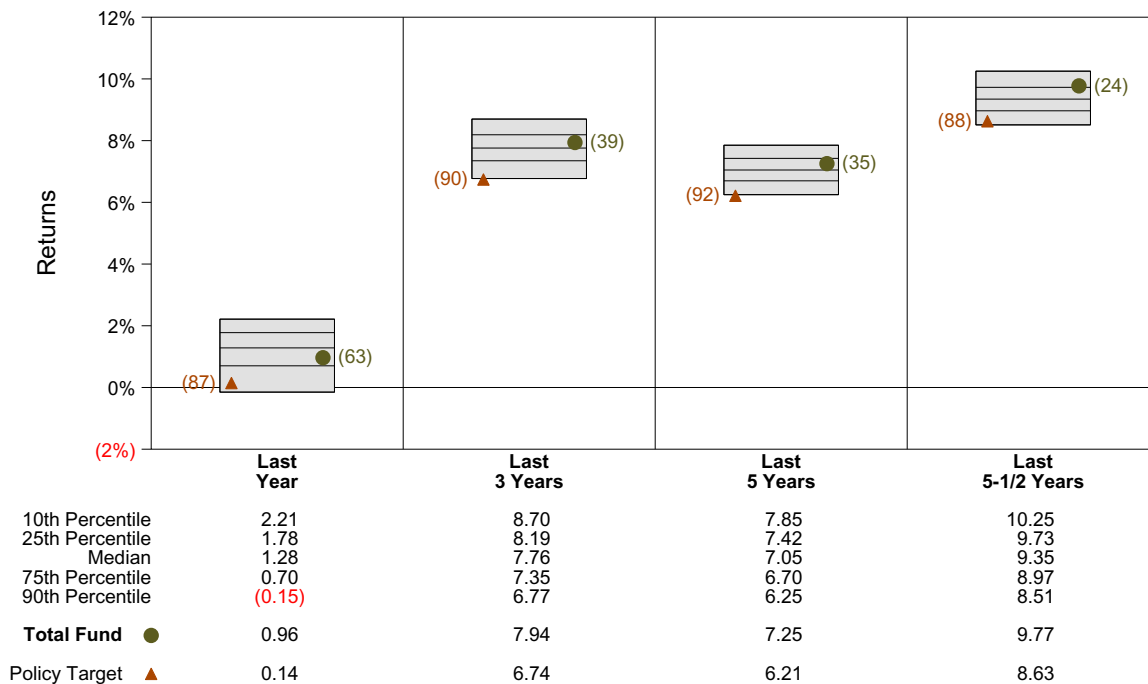
## Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the Public Fund Sponsor Database for periods ended December 31, 2015. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

### Public Fund Sponsor Database



### Asset Allocation Adjusted Ranking

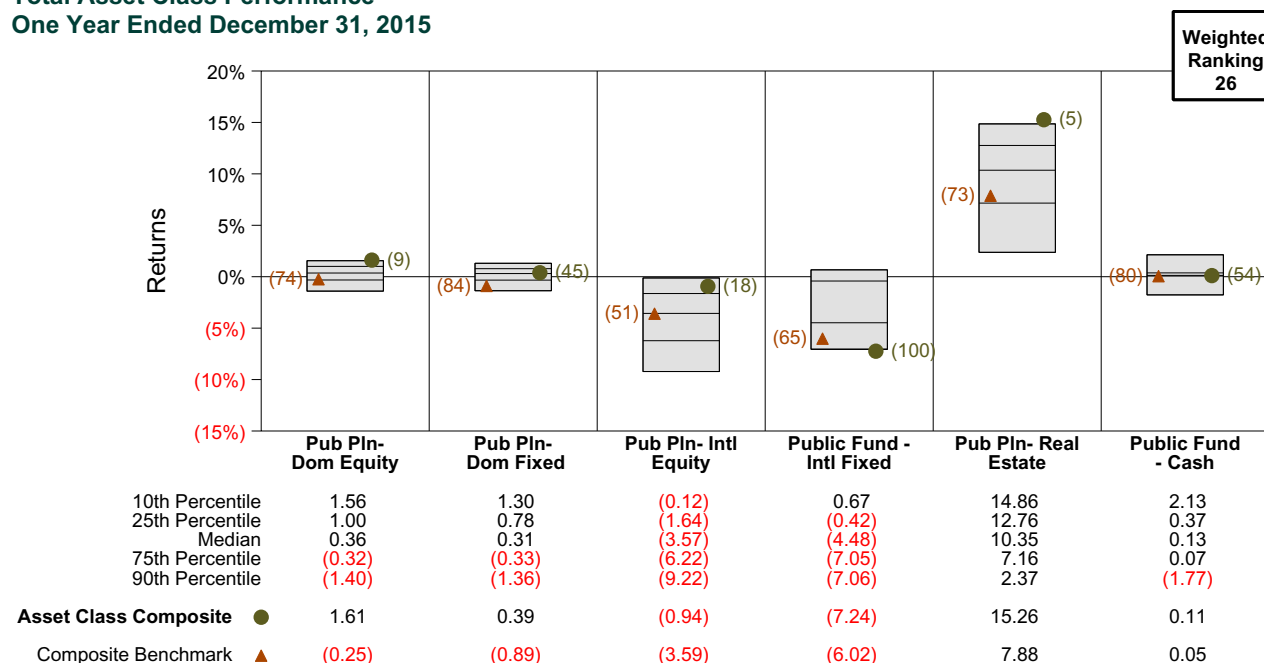


\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

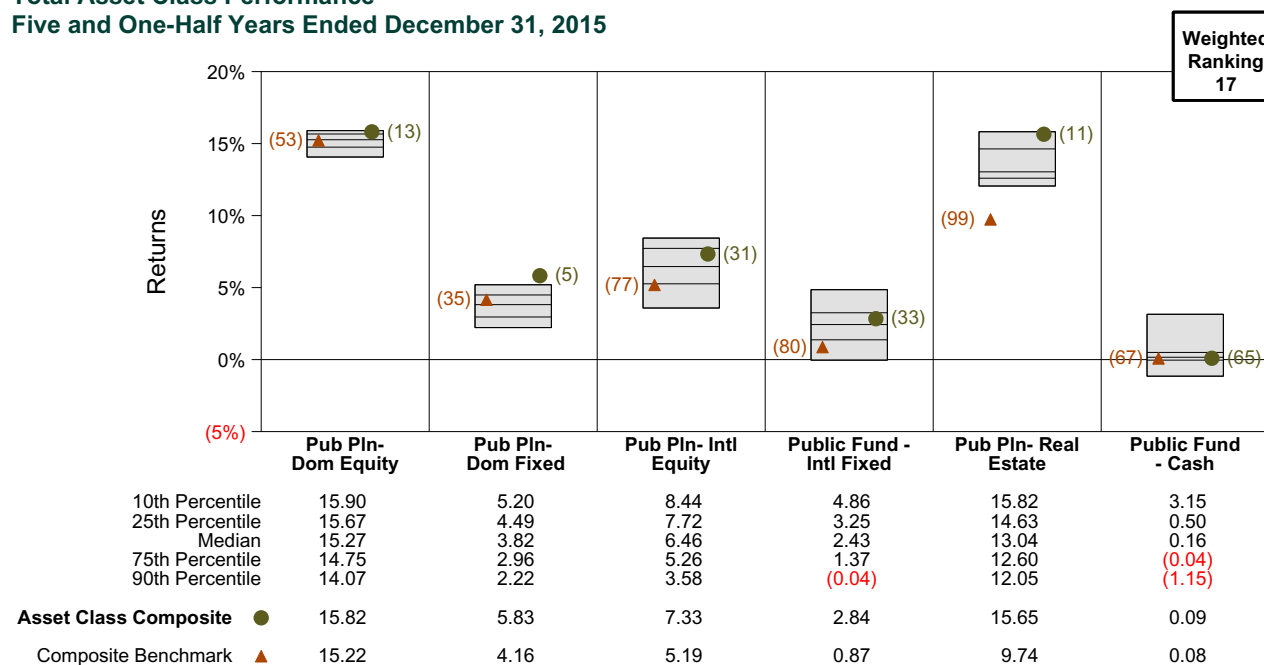
## Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

### Total Asset Class Performance One Year Ended December 31, 2015



### Total Asset Class Performance Five and One-Half Years Ended December 31, 2015



\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

## Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2015, with the distribution as of September 30, 2015. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Class Allocation

	December 31, 2015		September 30, 2015			
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
<b>GLOBAL EQUITY</b>	<b>\$1,161,761,495</b>	<b>57.05%</b>	<b>\$14,291,230</b>	<b>\$49,801,705</b>	<b>\$1,097,668,560</b>	<b>55.27%</b>
<b>Domestic Equity</b>	<b>\$451,887,336</b>	<b>22.19%</b>	<b>\$(13,606,855)</b>	<b>\$25,612,229</b>	<b>\$439,881,961</b>	<b>22.15%</b>
Large Cap	353,692,136	17.37%	(13,731,855)	22,423,830	345,000,161	17.37%
Small Cap	98,195,200	4.82%	125,000	3,188,400	94,881,800	4.78%
<b>International Equity</b>	<b>\$304,546,882</b>	<b>14.96%</b>	<b>\$7,978,935</b>	<b>\$13,292,165</b>	<b>\$283,275,783</b>	<b>14.26%</b>
Developed Intl Equity	241,935,764	11.88%	(21,065)	12,299,410	229,657,419	11.56%
Emerging Markets	62,611,119	3.07%	8,000,000	992,755	53,618,364	2.70%
<b>World Equity</b>	<b>\$324,514,228</b>	<b>15.94%</b>	<b>\$17,648,425</b>	<b>\$13,850,020</b>	<b>\$293,015,783</b>	<b>14.75%</b>
<b>Private Equity</b>	<b>\$80,813,048</b>	<b>3.97%</b>	<b>\$2,270,725</b>	<b>\$(2,952,709)</b>	<b>\$81,495,033</b>	<b>4.10%</b>
<b>GLOBAL FIXED INCOME</b>	<b>\$459,202,019</b>	<b>22.55%</b>	<b>\$(18,496,164)</b>	<b>\$(2,089,002)</b>	<b>\$479,787,185</b>	<b>24.16%</b>
<b>Fixed Income Comp</b>	<b>\$361,670,389</b>	<b>17.76%</b>	<b>\$(17,531,709)</b>	<b>\$(1,292,844)</b>	<b>\$380,494,942</b>	<b>19.16%</b>
Investment Grade Fixed	255,525,850	12.55%	(13,080,375)	297,858	268,308,366	13.51%
Below Inv. Grade Fixed Income	106,144,539	5.21%	(4,451,334)	(1,590,702)	112,186,576	5.65%
<b>International Fixed Income</b>	<b>\$97,531,630</b>	<b>4.79%</b>	<b>\$(964,455)</b>	<b>\$(796,158)</b>	<b>\$99,292,243</b>	<b>5.00%</b>
<b>GLOBAL REAL ASSETS</b>	<b>\$389,778,283</b>	<b>19.14%</b>	<b>\$(10,841,092)</b>	<b>\$7,397,615</b>	<b>\$393,221,760</b>	<b>19.80%</b>
Real Estate	222,901,030	10.95%	2,615,046	5,647,931	214,638,054	10.81%
Timber	69,159,052	3.40%	(13,744,829)	1,626,636	81,277,245	4.09%
Infrastructure	97,718,201	4.80%	288,690	123,049	97,306,462	4.90%
<b>Cash &amp; Equivalents</b>	<b>\$25,518,674</b>	<b>1.25%</b>	<b>\$10,234,644</b>	<b>\$8,422</b>	<b>\$15,275,609</b>	<b>0.77%</b>
<b>Securities Lending Income</b>	<b>\$0</b>	<b>0.00%</b>	<b>\$(67,403)</b>	<b>\$67,403</b>	<b>-</b>	<b>-</b>
<b>Total Fund</b>	<b>\$2,036,260,471</b>	<b>100.0%</b>	<b>\$(4,878,786)</b>	<b>\$55,186,142</b>	<b>\$1,985,953,114</b>	<b>100.0%</b>

PLEASE REFER TO PAGES 36-38 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 5-1/2 Years
<b>Global Equity</b>					
Gross	4.54%	(0.87%)	9.89%	-	-
Net	4.49%	(1.19%)	9.53%	-	-
Wtd Avg Global Equity Benchmark	4.42%	(1.96%)	8.70%	-	-
<b>Domestic Equity</b>					
Gross	5.83%	1.61%	15.66%	12.38%	15.82%
Net	5.80%	1.46%	15.45%	12.13%	15.56%
Wtd Avg Domestic Equity Benchmark	5.86%	(0.25%)	14.31%	11.78%	15.22%
<b>Large Cap Equity</b>					
Gross	6.53%	3.49%	16.69%	13.08%	16.33%
Net	6.51%	3.34%	16.50%	12.83%	16.06%
Benchmark(1)	6.50%	0.92%	15.01%	12.58%	15.69%
<b>Small Cap Equity</b>					
Gross	3.36%	(4.71%)	11.99%	10.07%	14.01%
Net	3.36%	(4.90%)	11.74%	9.82%	13.76%
Russell 2000 Index	3.59%	(4.41%)	11.65%	9.19%	13.51%
<b>International Equity</b>					
Gross	4.70%	(0.94%)	4.81%	3.56%	7.33%
Net	4.65%	(1.14%)	4.56%	3.25%	7.00%
Wtd Avg Intl Equity Benchmark	3.93%	(3.59%)	2.72%	1.82%	5.19%
<b>Developed Intl Equity</b>					
Gross	5.36%	1.77%	6.99%	4.70%	8.45%
Net	5.29%	1.52%	6.72%	4.39%	8.12%
Benchmark(2)	4.71%	(0.81%)	5.01%	3.37%	6.38%
<b>Emerging Markets</b>					
Gross	2.05%	(11.43%)	(4.35%)	(1.33%)	2.57%
Net	2.05%	(11.43%)	(4.56%)	(1.66%)	2.21%
Benchmark(3)	0.66%	(14.92%)	(6.76%)	(4.77%)	(0.12%)
<b>World Equity</b>					
Gross	4.83%	(1.97%)	9.83%	-	-
Net	4.75%	(2.73%)	9.02%	-	-
MSCI World Index	5.50%	(0.87%)	9.63%	7.59%	11.13%
<b>Private Equity</b>					
Net	(3.57%)	(8.24%)	(0.29%)	2.46%	3.70%

(1) S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.

(2) 50% Hedged EAFE through 3/31/2011 and MSCI EAFE thereafter.

(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

PLEASE REFER TO PAGES 39-43 FOR INVESTMENT MANAGER LEVEL RETURNS.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 5-1/2 Years
<b>Global Fixed Income</b>					
Gross	(0.50%)	(1.26%)	1.87%	-	-
Net	(0.55%)	(1.50%)	1.63%	-	-
Wtd Avg Global Fixed Inc. Benchmark	(1.06%)	(2.05%)	0.28%	-	-
<b>Domestic Fixed Income</b>					
Gross	(0.41%)	0.39%	3.34%	5.25%	5.83%
Net	(0.45%)	0.18%	3.13%	5.15%	5.70%
Wtd Avg Domestic FI Benchmark	(0.99%)	(0.89%)	1.55%	3.69%	4.16%
<b>Inv. Grade Fixed Income</b>					
Gross	0.12%	1.74%	3.20%	4.88%	5.08%
Net	0.11%	1.64%	3.10%	4.72%	4.91%
Barclays Aggregate Index	(0.57%)	0.55%	1.44%	3.25%	3.16%
<b>Below Inv. Grade Fixed Income</b>					
Gross	(1.65%)	(2.72%)	3.70%	6.77%	7.93%
Net	(1.75%)	(3.13%)	3.24%	6.33%	7.49%
Barclays HY Corp 2% Issue	(2.06%)	(4.43%)	1.70%	5.03%	6.40%
<b>International Fixed Income</b>					
Gross	(0.80%)	(7.24%)	(3.27%)	1.25%	2.84%
Net	(0.89%)	(7.58%)	(3.61%)	0.88%	2.48%
Wtd Avg Intl Fixed Income Benchmark	(1.26%)	(6.02%)	(4.07%)	(0.83%)	0.87%
<b>Global Real Assets</b>					
Gross	1.89%	9.44%	9.35%	-	-
Net	1.79%	8.98%	8.92%	-	-
Wtd Avg Global Real Assets Benchmark	1.72%	7.90%	8.23%	-	-
<b>Real Estate</b>					
Gross	2.54%	15.26%	14.90%	14.85%	15.65%
Net	2.42%	14.64%	14.34%	14.29%	15.07%
NCREIF Total Index	2.91%	13.33%	12.04%	12.18%	12.70%
<b>Timber</b>					
Net	2.01%	5.70%	2.14%	-	-
NCREIF Timberland Index	1.86%	4.97%	8.35%	6.84%	6.03%
<b>Infrastructure</b>					
Gross	0.13%	(0.02%)	4.95%	-	-
Net	(0.02%)	(0.53%)	4.34%	-	-
CPI-W	(0.80%)	0.38%	0.72%	1.40%	1.40%
<b>Cash &amp; Equivalents - Net</b>	<b>0.04%</b>	<b>0.11%</b>	<b>0.07%</b>	<b>0.08%</b>	<b>0.09%</b>
3-month Treasury Bill	0.03%	0.05%	0.05%	0.07%	0.08%
<b>Total Fund</b>					
Gross	2.78%	0.96%	7.94%	7.25%	9.77%
Net	2.72%	0.64%	7.60%	6.90%	9.41%
Target*	2.67%	0.14%	6.74%	6.21%	8.63%

\* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Global Agg ex USD, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% MSCI Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

PLEASE REFER TO PAGES 39-43 FOR INVESTMENT MANAGER LEVEL RETURNS.



## L.A. Capital Period Ended December 31, 2015

### Investment Philosophy

The LA Capital Structured portfolio is a large growth portfolio benchmarked to the Russell 1000 Growth Index. It is an active assignment meaning that it targets a 2% alpha and constrains its risk budget (tracking error) to 4% relative to the benchmark. LA Capital believes that investment results are driven by Investor Preferences and thus recognize that when preferences shift a different posture related to that factor is warranted.

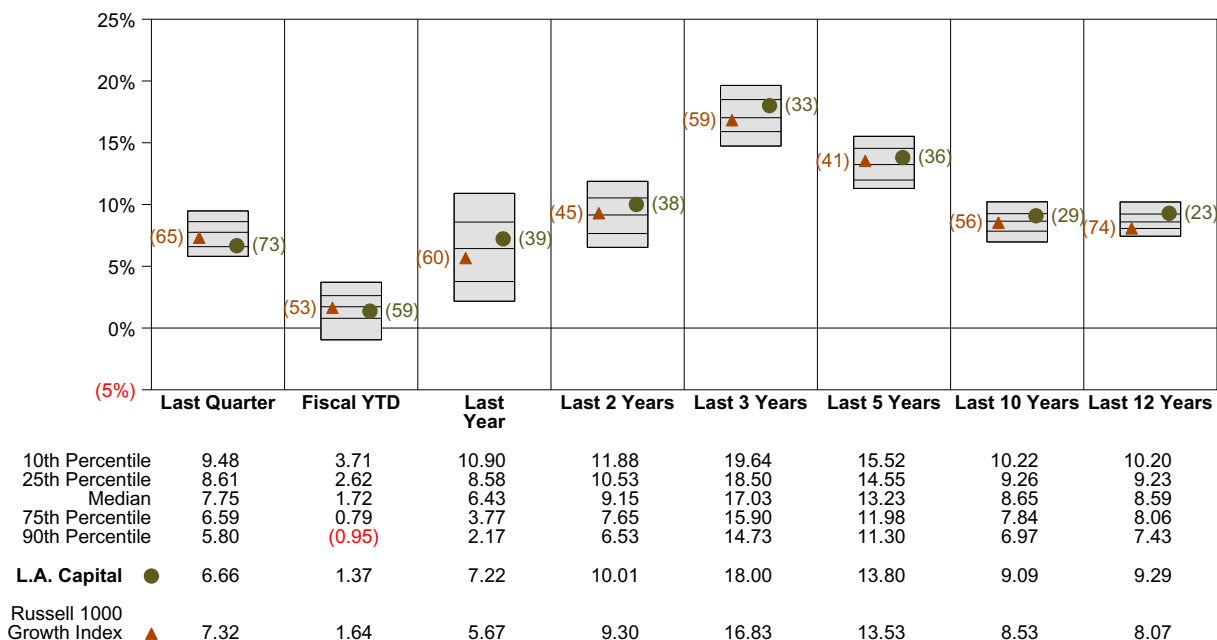
### Quarterly Summary and Highlights

- L.A. Capital's portfolio posted a 6.66% return for the quarter placing it in the 73 percentile of the CAI Large Cap Growth Style group for the quarter and in the 39 percentile for the last year.
- L.A. Capital's portfolio underperformed the Russell 1000 Growth Index by 0.65% for the quarter and outperformed the Russell 1000 Growth Index for the year by 1.55%.

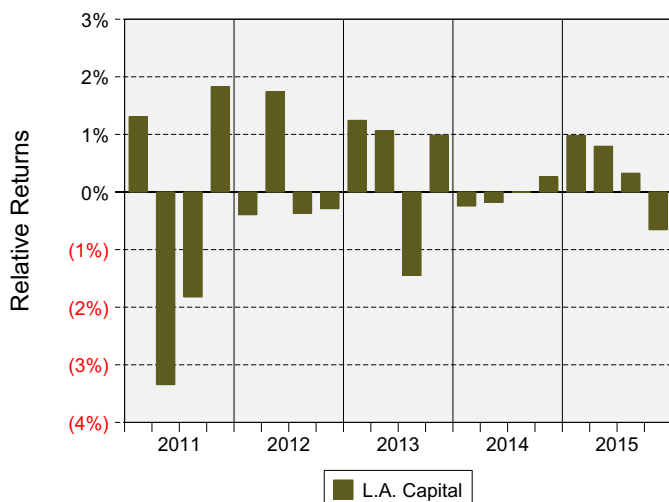
### Quarterly Asset Growth

Beginning Market Value	\$300,594,152
Net New Investment	\$-16,912,211
Investment Gains/(Losses)	\$19,844,879
Ending Market Value	\$303,526,819

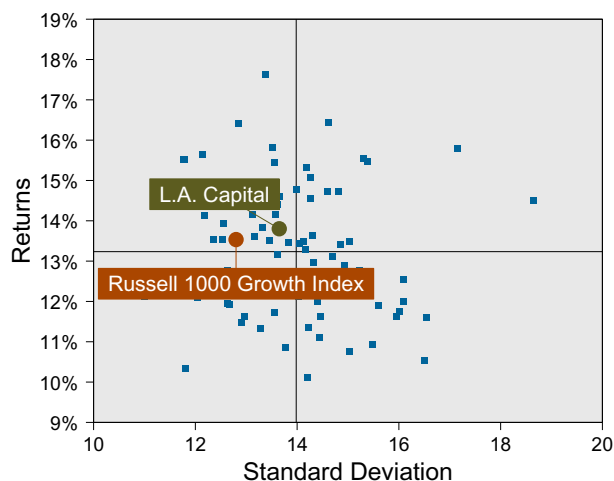
### Performance vs CAI Large Cap Growth Style (Gross)



### Relative Return vs Russell 1000 Growth Index



### CAI Large Cap Growth Style (Gross) Annualized Five Year Risk vs Return



## L.A. Capital Management Enhanced Index Period Ended December 31, 2015

### Investment Philosophy

The LA Capital Enhanced portfolio is a large core portfolio benchmarked to the Russell 1000 Index. Characterized as an enhanced index assignment, its objective is to track the benchmark with lower variability. The pension portfolio began in August of 2000 and the insurance portfolio was initiated in April of 2004. Since October of 2006 a small portion of each of the two core accounts was allocated into the Large Cap Alpha Fund with intent to add incremental alpha to the assignment given that the information ratio was expected to be higher.

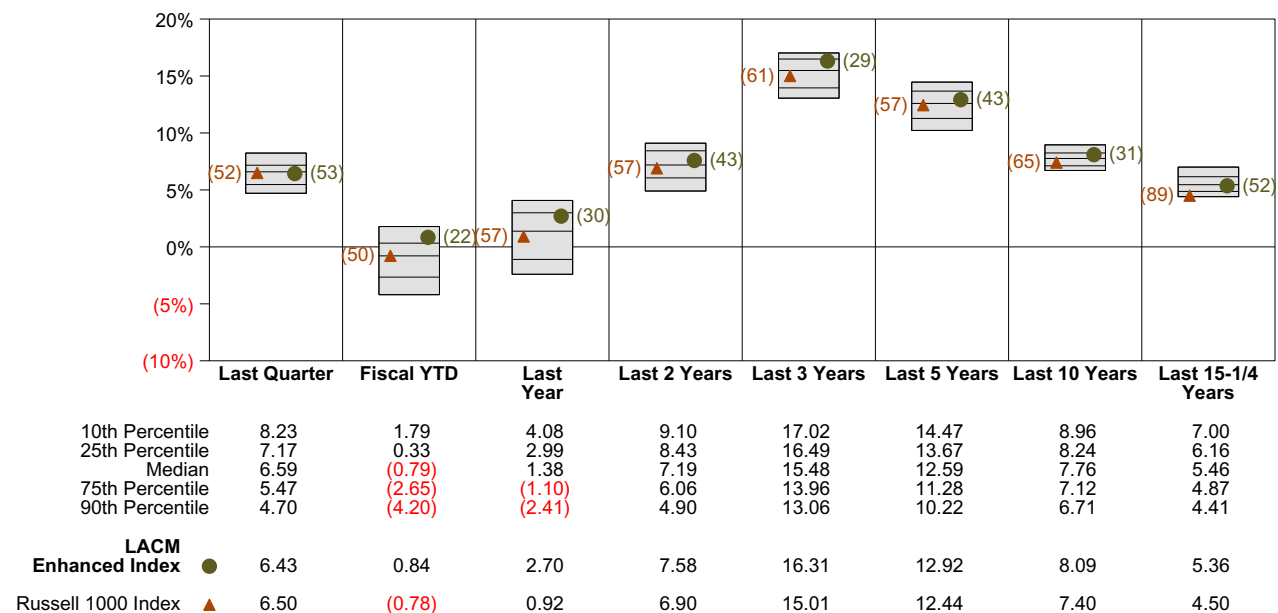
### Quarterly Summary and Highlights

- LACM Enhanced Index's portfolio posted a 6.43% return for the quarter placing it in the 53 percentile of the CAI Large Cap Core Style group for the quarter and in the 30 percentile for the last year.
- LACM Enhanced Index's portfolio underperformed the Russell 1000 Index by 0.06% for the quarter and outperformed the Russell 1000 Index for the year by 1.78%.

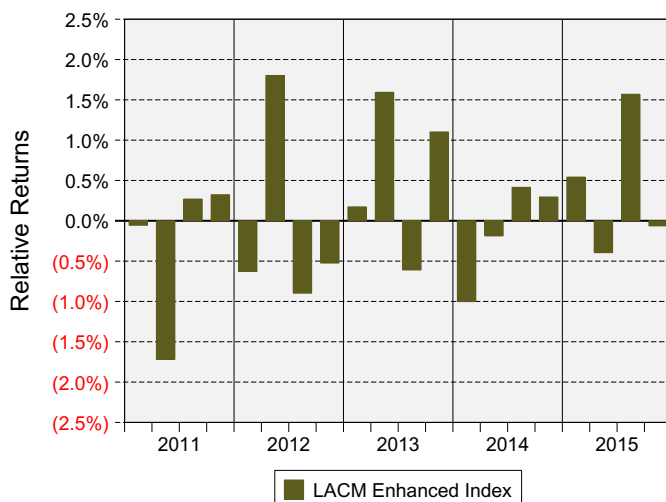
### Quarterly Asset Growth

Beginning Market Value	\$194,115,326
Net New Investment	\$-24,233,109
Investment Gains/(Losses)	\$12,181,875
Ending Market Value	\$182,064,091

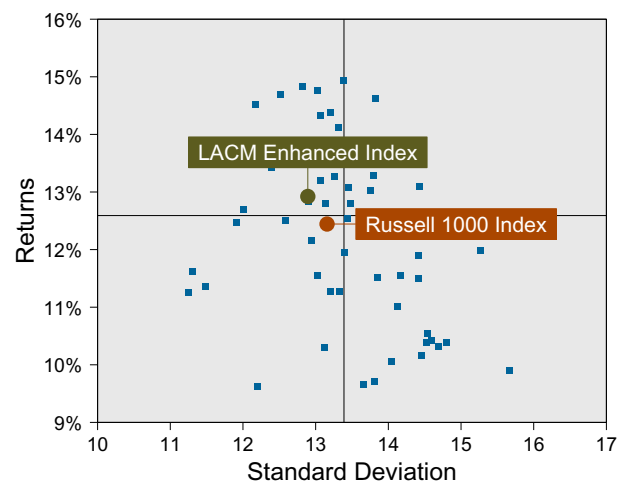
### Performance vs CAI Large Cap Core Style (Gross)



### Relative Return vs Russell 1000 Index



### CAI Large Cap Core Style (Gross) Annualized Five Year Risk vs Return



## Northern Trust AM Enh S&P500 Period Ended December 31, 2015

### Investment Philosophy

Northern Trust AM Enhanced S&P 500 employs a quantitative investment approach, focusing on the stock selection process as the principal source of value added. The account invests primarily in a broadly diversified portfolio of equity securities that include securities convertible into equity securities (including common stock), warrants, rights and units or shares in trusts, exchange traded funds and investment companies. The Investment Manager intends to use futures and options to manage market risk associated with the account's investments.

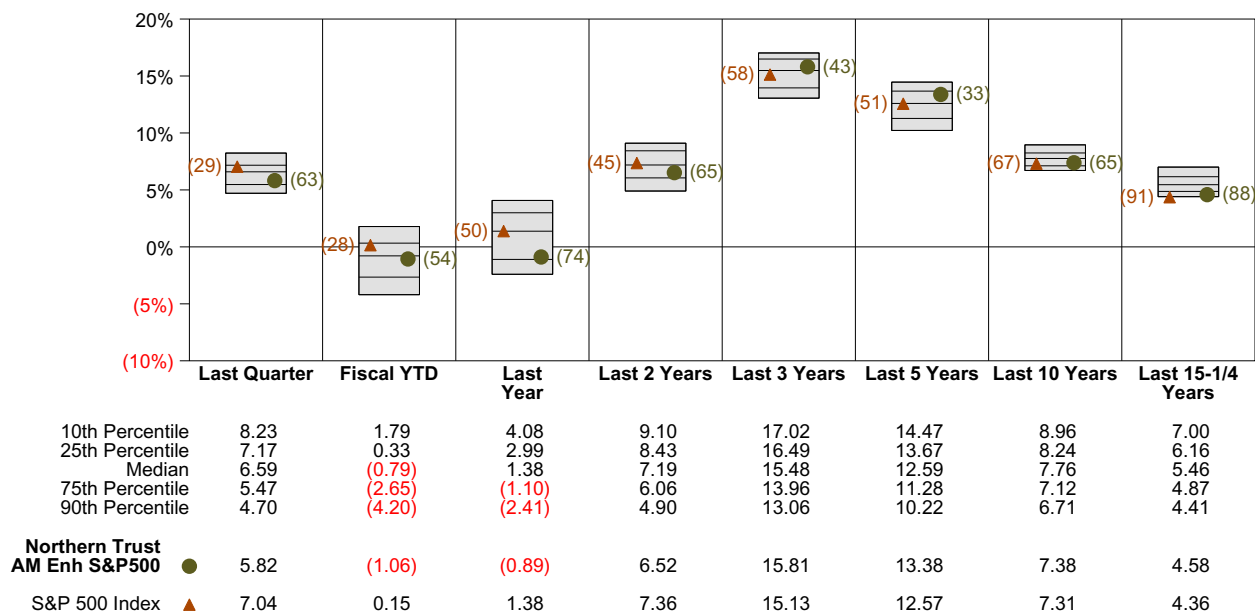
### Quarterly Summary and Highlights

- Northern Trust AM Enh S&P500's portfolio posted a 5.82% return for the quarter placing it in the 63 percentile of the CAI Large Cap Core Style group for the quarter and in the 74 percentile for the last year.
- Northern Trust AM Enh S&P500's portfolio underperformed the S&P 500 Index by 1.23% for the quarter and underperformed the S&P 500 Index for the year by 2.27%.

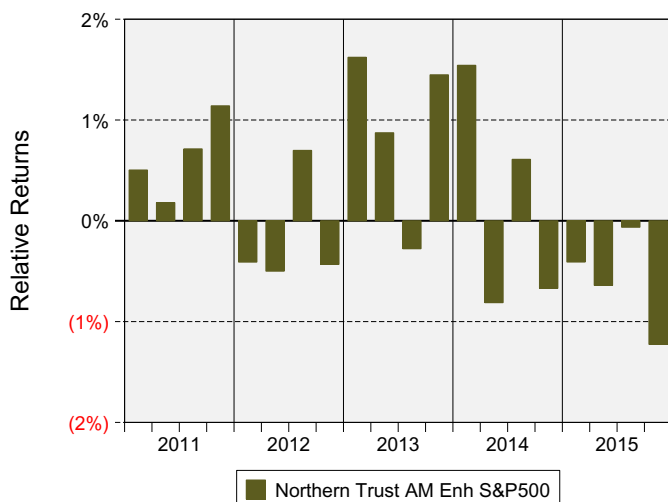
### Quarterly Asset Growth

Beginning Market Value	\$126,474,833
Net New Investment	\$-2,725,000
Investment Gains/(Losses)	\$7,325,772
Ending Market Value	\$131,075,605

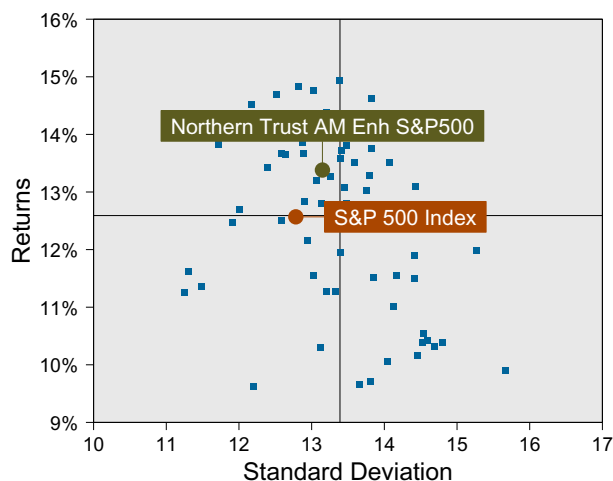
### Performance vs CAI Large Cap Core Style (Gross)



### Relative Return vs S&P 500 Index



### CAI Large Cap Core Style (Gross) Annualized Five Year Risk vs Return



## Parametric Clifton Enh S&P Period Ended December 31, 2015

### Investment Philosophy

Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

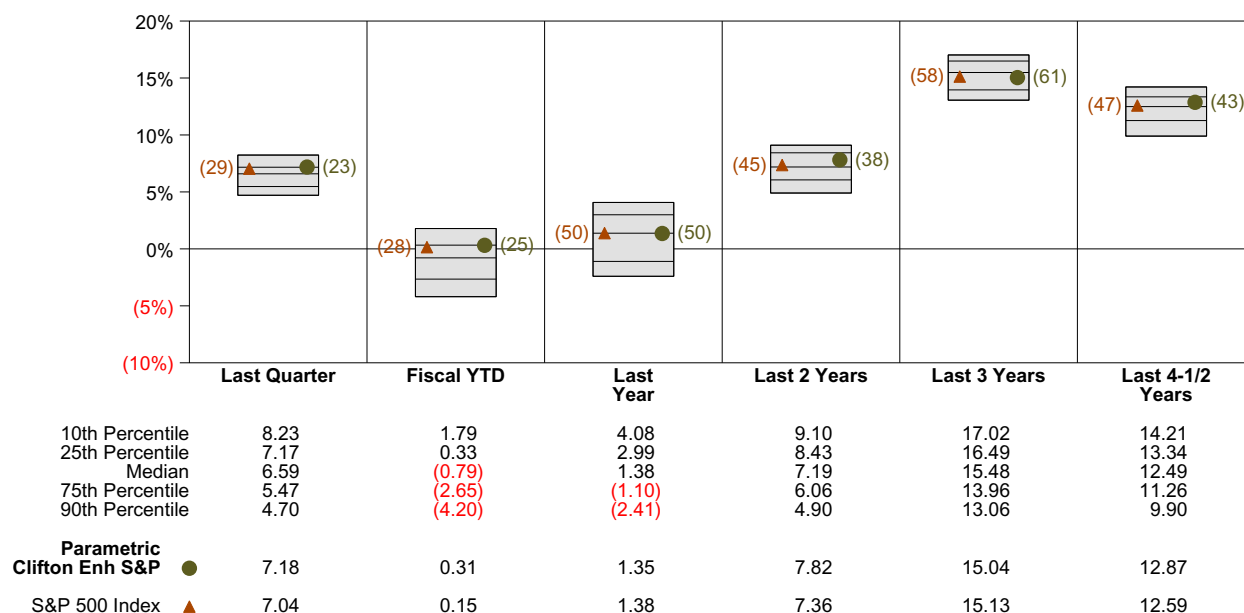
### Quarterly Summary and Highlights

- Parametric Clifton Enh S&P's portfolio posted a 7.18% return for the quarter placing it in the 23 percentile of the CAI Large Cap Core Style group for the quarter and in the 50 percentile for the last year.
- Parametric Clifton Enh S&P's portfolio outperformed the S&P 500 Index by 0.14% for the quarter and underperformed the S&P 500 Index for the year by 0.03%.

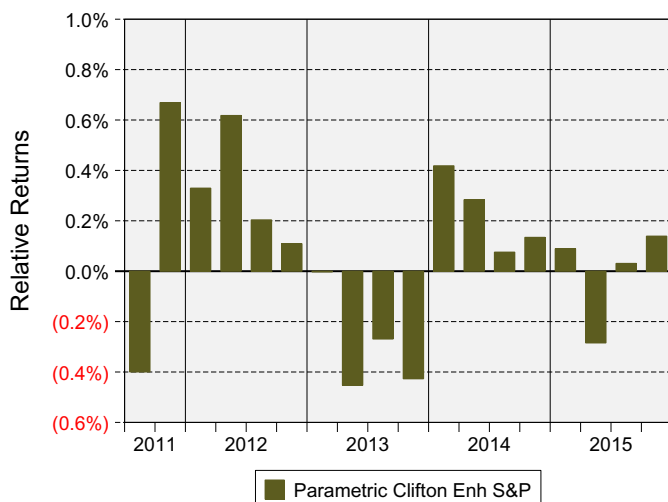
### Quarterly Asset Growth

Beginning Market Value	\$166,579,551
Net New Investment	\$-3,600,000
Investment Gains/(Losses)	\$11,992,104
Ending Market Value	\$174,971,655

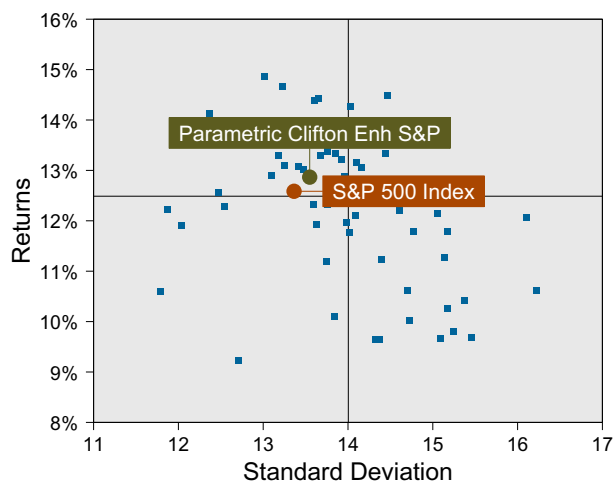
### Performance vs CAI Large Cap Core Style (Gross)



### Relative Return vs S&P 500 Index



### CAI Large Cap Core Style (Gross) Annualized Four and One-Half Year Risk vs Return



## Callan Period Ended December 31, 2015

### Investment Philosophy

The fundamental belief inherent in this strategy is that the stock-weightings reflected in the average portfolio of a broad universe of institutional Small Cap managers is a more efficient representation of the Small Cap market than any of the more mechanical Small Cap indices that are typically employed as benchmarks. Hence, a portfolio designed to generate the return of this average portfolio in the most cost-effective possible manner will consistently out-perform the standard benchmarks on a risk-adjusted basis over time. This process results in a total portfolio made up of 40 equity sub-advisors, equally weighted in the Fund's portfolio, which very closely tracks the performance of the average actively managed institutional small cap product (historical tracking error since inception of approximately one percent annualized).

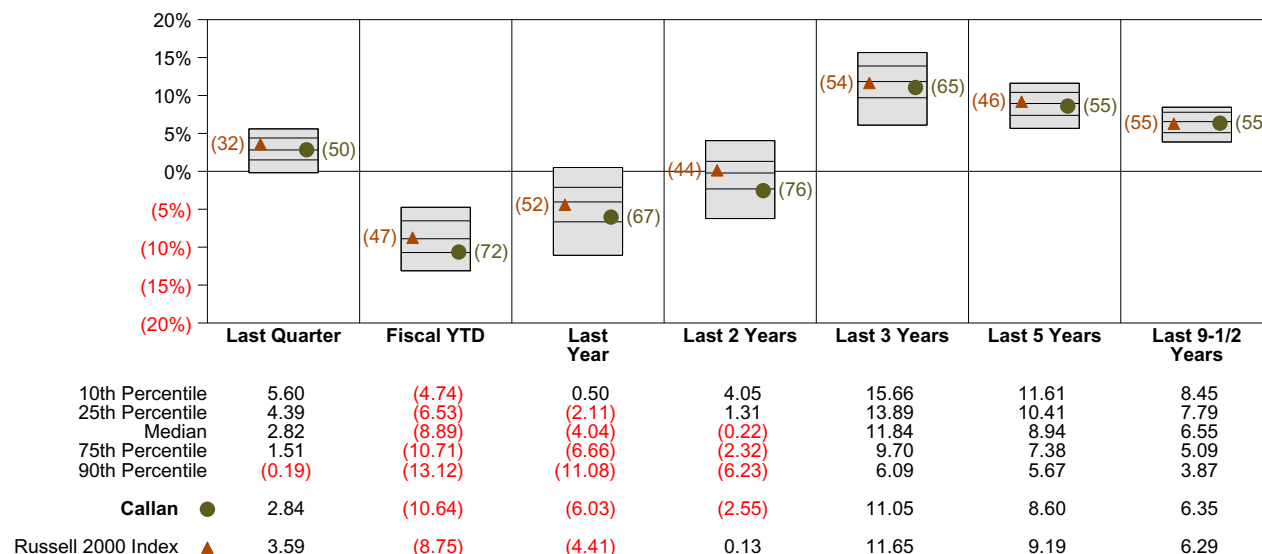
### Quarterly Summary and Highlights

- Callan's portfolio posted a 2.84% return for the quarter placing it in the 50 percentile of the CAI MF - Small Cap Broad Style group for the quarter and in the 67 percentile for the last year.
- Callan's portfolio underperformed the Russell 2000 Index by 0.75% for the quarter and underperformed the Russell 2000 Index for the year by 1.62%.

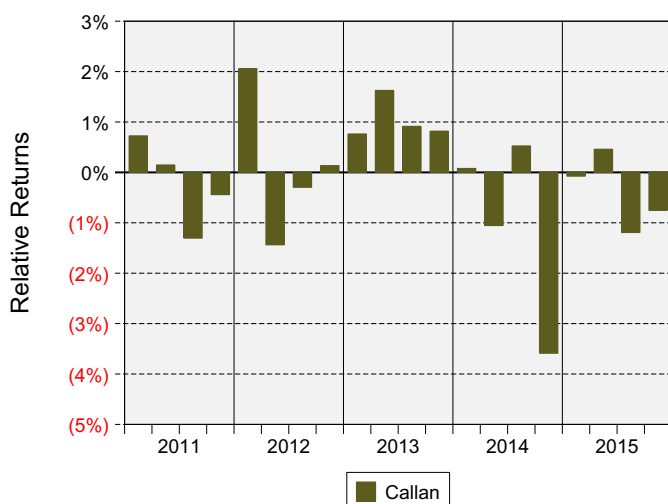
### Quarterly Asset Growth

Beginning Market Value	\$107,803,433
Net New Investment	\$0
Investment Gains/(Losses)	\$3,061,944
Ending Market Value	\$110,865,377

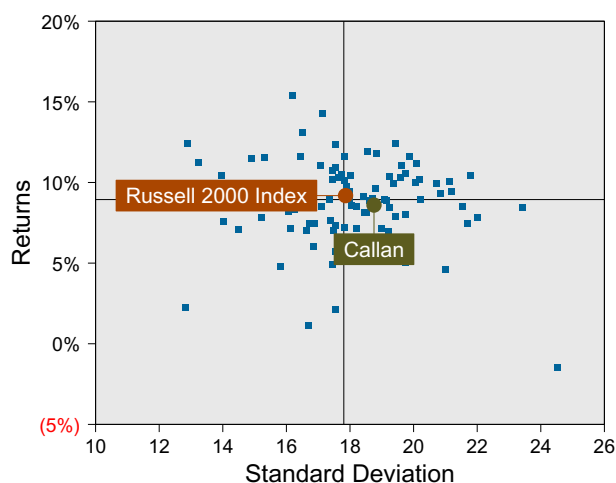
### Performance vs CAI MF - Small Cap Broad Style (Net)



### Relative Return vs Russell 2000 Index



### CAI MF - Small Cap Broad Style (Net) Annualized Five Year Risk vs Return



## Parametric Clifton Enh SmCap Period Ended December 31, 2015

### Investment Philosophy

Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

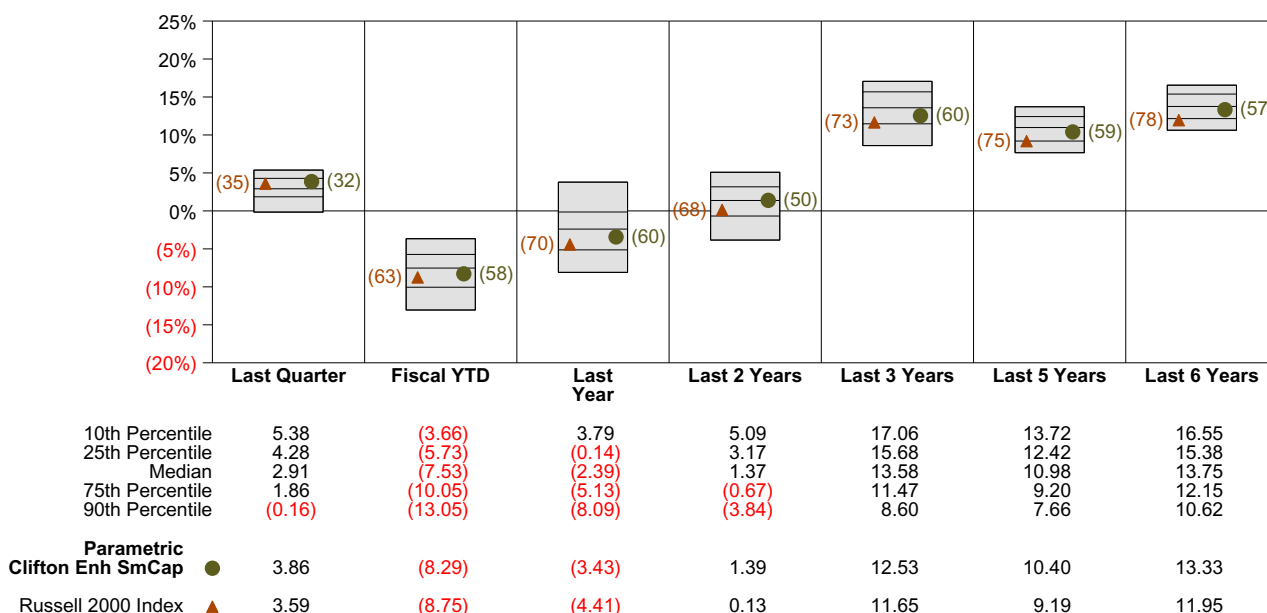
### Quarterly Summary and Highlights

- Parametric Clifton Enh SmCap's portfolio posted a 3.86% return for the quarter placing it in the 32 percentile of the CAI Small Capitalization Style group for the quarter and in the 60 percentile for the last year.
- Parametric Clifton Enh SmCap's portfolio outperformed the Russell 2000 Index by 0.27% for the quarter and outperformed the Russell 2000 Index for the year by 0.98%.

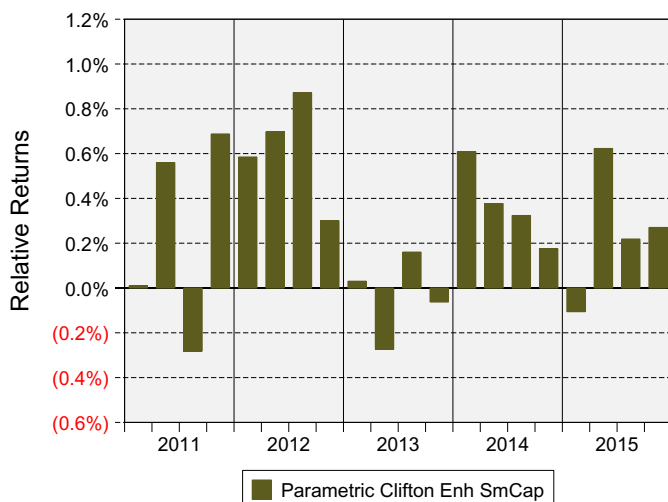
### Quarterly Asset Growth

Beginning Market Value	\$111,462,731
Net New Investment	\$-4,165,000
Investment Gains/(Losses)	\$4,412,134
Ending Market Value	\$111,709,864

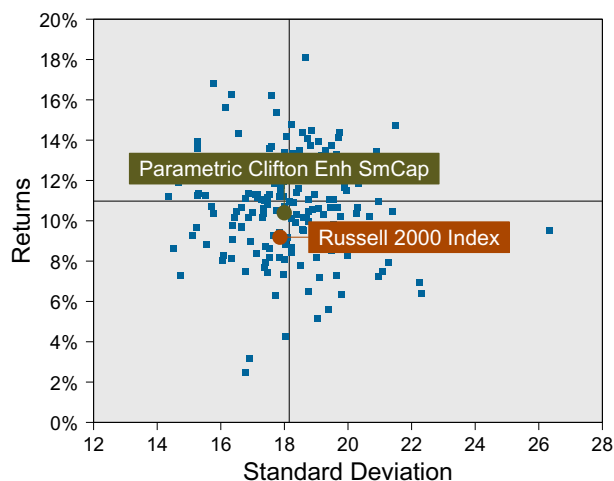
### Performance vs CAI Small Capitalization Style (Gross)



### Relative Return vs Russell 2000 Index



### CAI Small Capitalization Style (Gross) Annualized Five Year Risk vs Return





## Capital Group Period Ended December 31, 2015

### Investment Philosophy

The Portfolio will invest primarily in equity or equity type securities of companies in developed countries excluding the U.S. These equity securities will be listed on a stock exchange or traded in another recognized market and include, but are not limited to, common and preferred stocks, securities convertible or exchangeable into common or preferred stock, warrants, rights and depository arrangements. **\*MSCI EAFE through 12/31/1996, 50% Hedged EAFE through 03/31/2011 and MSCI EAFE again thereafter.**

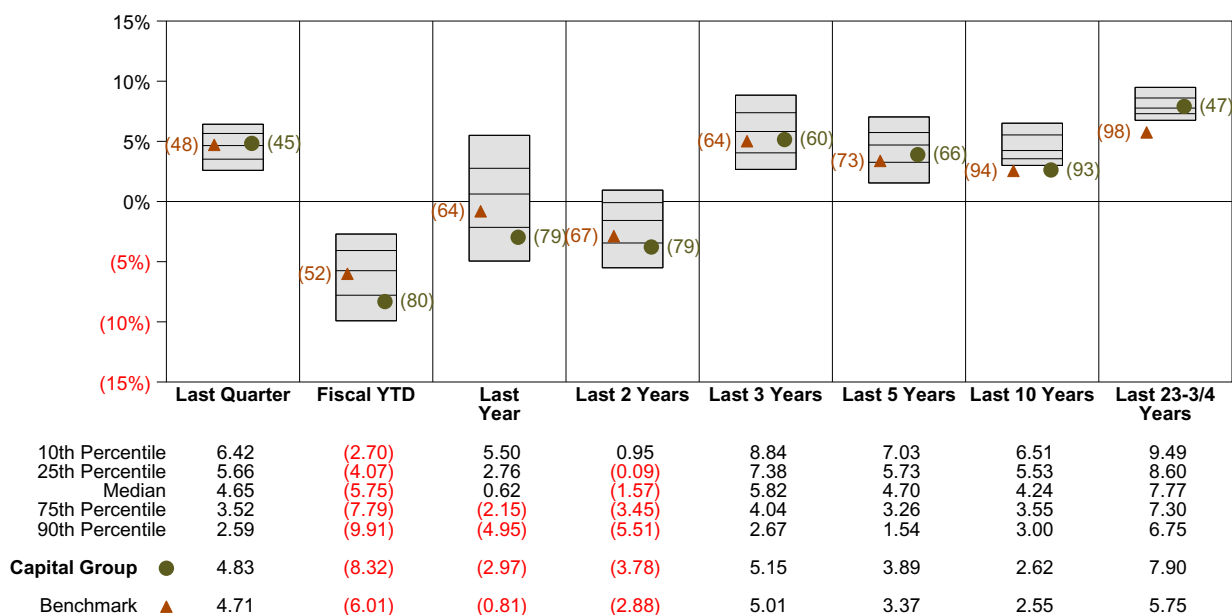
### Quarterly Summary and Highlights

- Capital Group's portfolio posted a 4.83% return for the quarter placing it in the 45 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 79 percentile for the last year.
- Capital Group's portfolio outperformed the Benchmark by 0.12% for the quarter and underperformed the Benchmark for the year by 2.16%.

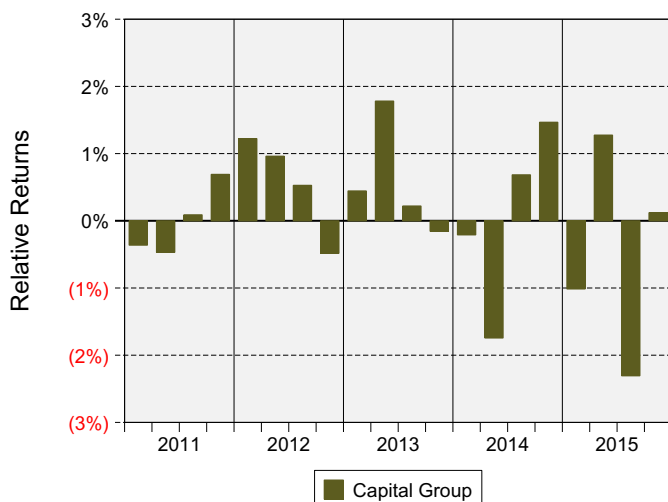
### Quarterly Asset Growth

Beginning Market Value	\$119,663,413
Net New Investment	\$-131,945
Investment Gains/(Losses)	\$5,782,239
Ending Market Value	\$125,313,707

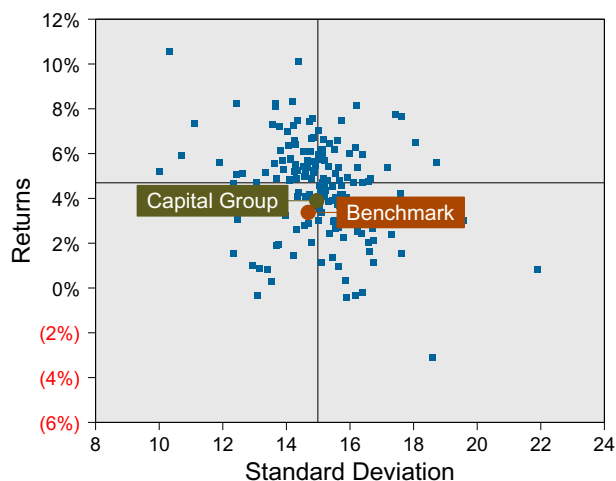
### Performance vs CAI Non-U.S. Equity Style (Gross)



### Relative Return vs Benchmark



### CAI Non-U.S. Equity Style (Gross) Annualized Five Year Risk vs Return



## DFA International Small Cap Value Fund

### Period Ended December 31, 2015

#### Investment Philosophy

The International Small Cap Value Portfolio invests in the stocks of small, non-US developed markets companies that Dimensional believes to be value stocks at the time of purchase. Specifically, it looks at companies that fall within the smallest 8-10% of each country's market capitalization, and who's shares have a high book value in relation to their market value (BtM). It does not invest in emerging markets.

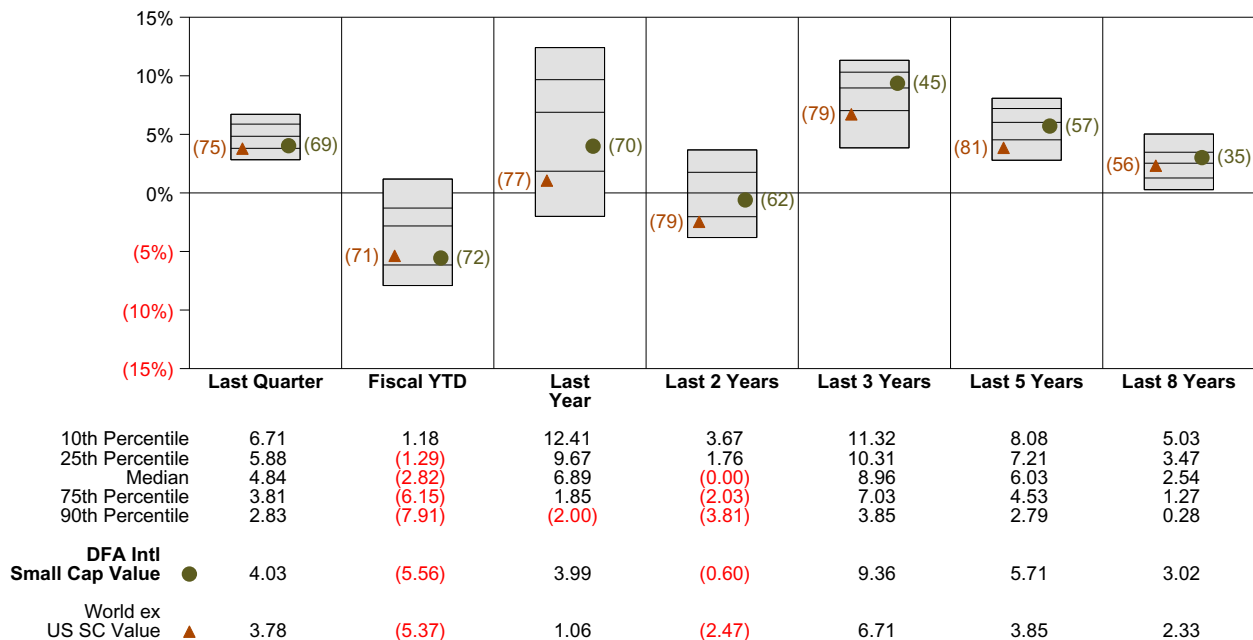
#### Quarterly Summary and Highlights

- DFA Intl Small Cap Value's portfolio posted a 4.03% return for the quarter placing it in the 69 percentile of the Lipper: International Small Cap Obj group for the quarter and in the 70 percentile for the last year.
- DFA Intl Small Cap Value's portfolio outperformed the World ex US SC Value by 0.25% for the quarter and outperformed the World ex US SC Value for the year by 2.93%.

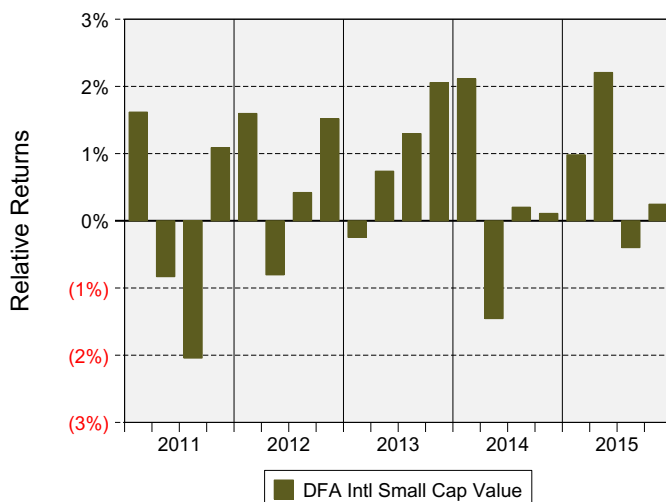
#### Quarterly Asset Growth

Beginning Market Value	\$71,974,049
Net New Investment	\$0
Investment Gains/(Losses)	\$2,901,043
Ending Market Value	\$74,875,091

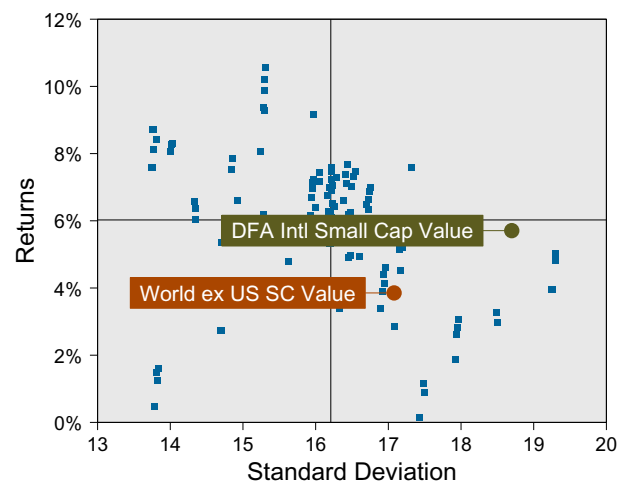
#### Performance vs Lipper: International Small Cap Obj (Net)



#### Relative Return vs World ex US SC Value



#### Lipper: International Small Cap Obj (Net) Annualized Five Year Risk vs Return



## Northern Tr AM Wrld ex US Period Ended December 31, 2015

### Investment Philosophy

The Fund's objective is to provide investment results that approximate the overall performance of the MSCI World ex-US Equity Index.

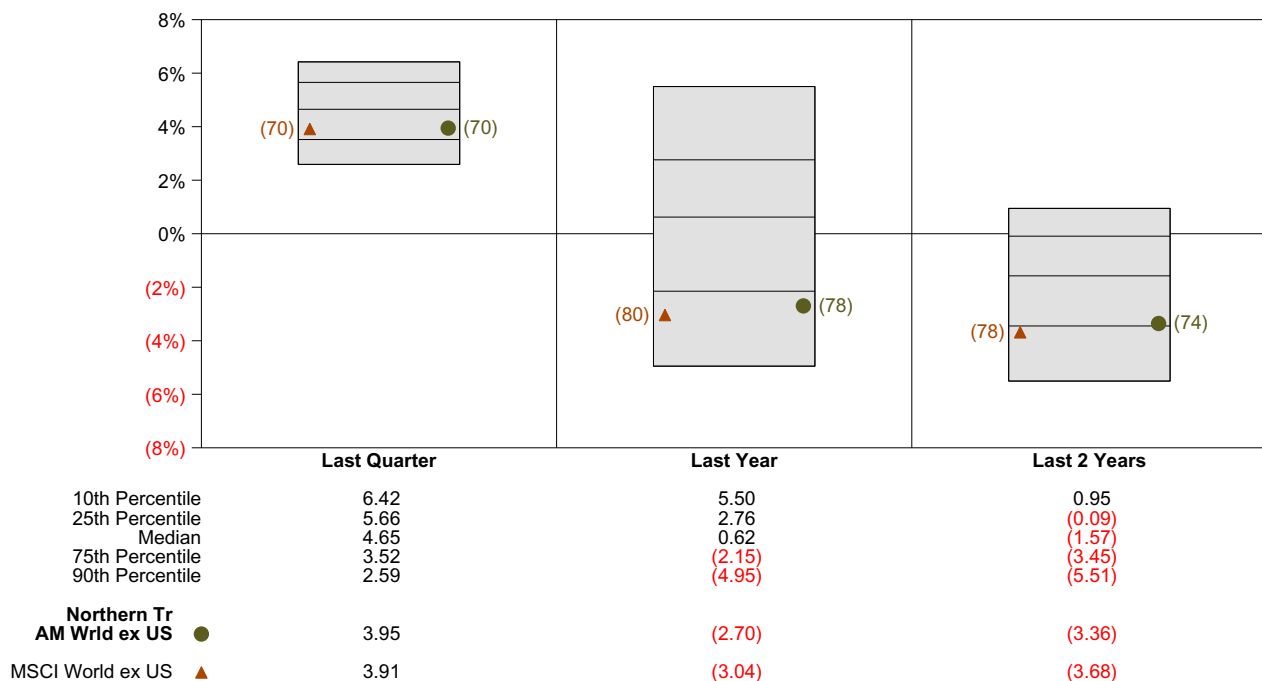
### Quarterly Summary and Highlights

- Northern Tr AM Wrld ex US's portfolio posted a 3.95% return for the quarter placing it in the 70 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 78 percentile for the last year.
- Northern Tr AM Wrld ex US's portfolio outperformed the MSCI World ex US by 0.03% for the quarter and outperformed the MSCI World ex US for the year by 0.34%.

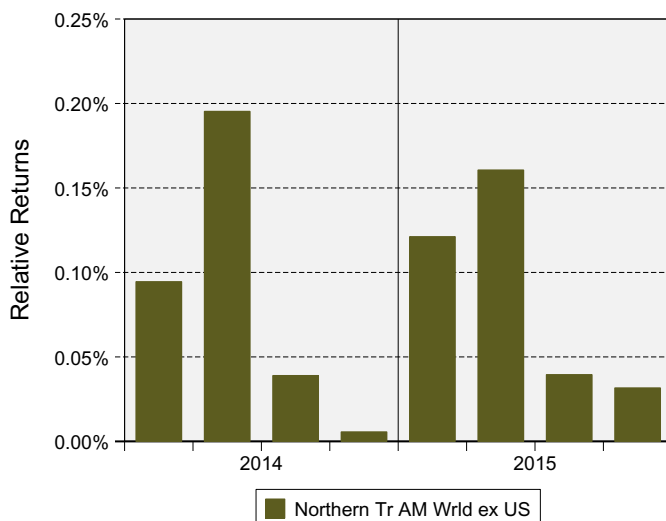
### Quarterly Asset Growth

Beginning Market Value	\$220,918,294
Net New Investment	\$0
Investment Gains/(Losses)	\$8,718,221
Ending Market Value	\$229,636,515

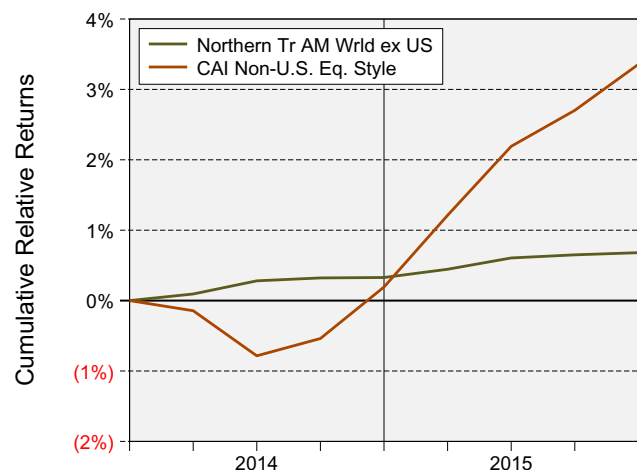
### Performance vs CAI Non-U.S. Equity Style (Gross)



### Relative Return vs MSCI World ex US



### Cumulative Returns vs MSCI World ex US



## Wellington Management Period Ended December 31, 2015

### Investment Philosophy

The International Small Cap Opportunities investment approach is bottom-up focused, and leverages the global research resources at Wellington Management. In implementing purchase decisions, consideration is given to the size, liquidity, and volatility of these prospects. Sell decisions are based on changing fundamentals or valuations, or on finding better opportunities elsewhere. The assets are not hedged.

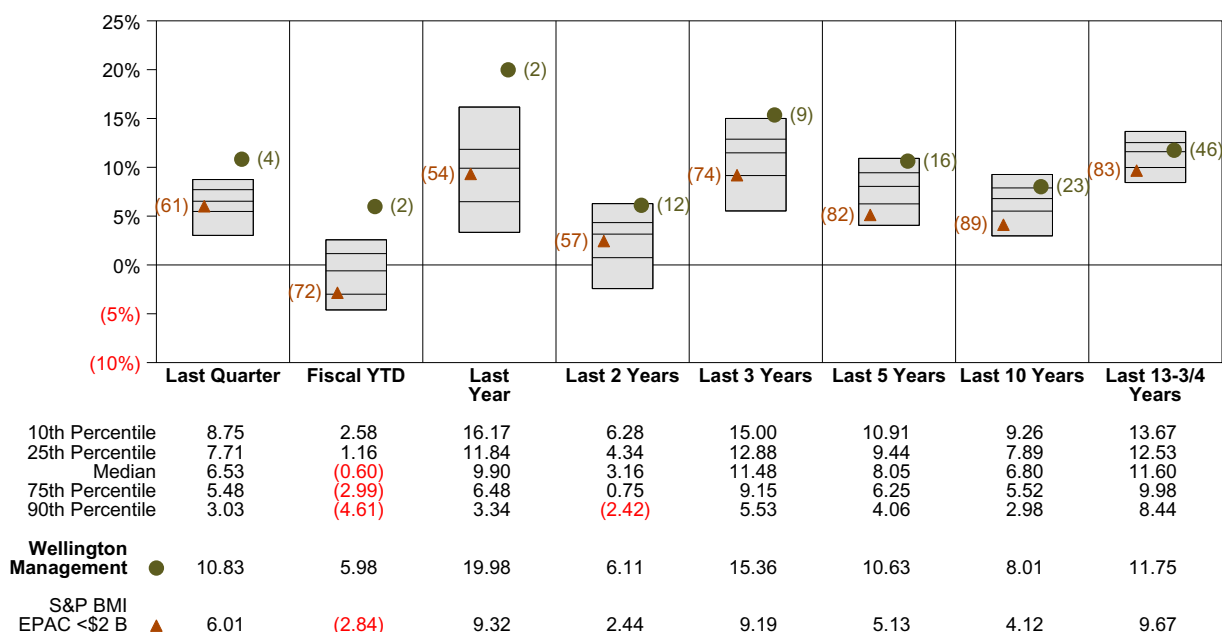
### Quarterly Summary and Highlights

- Wellington Management's portfolio posted a 10.83% return for the quarter placing it in the 4 percentile of the CAI International Small Cap Style group for the quarter and in the 2 percentile for the last year.
- Wellington Management's portfolio outperformed the S&P BMI EPAC <\$2 B by 4.82% for the quarter and outperformed the S&P BMI EPAC <\$2 B for the year by 10.66%.

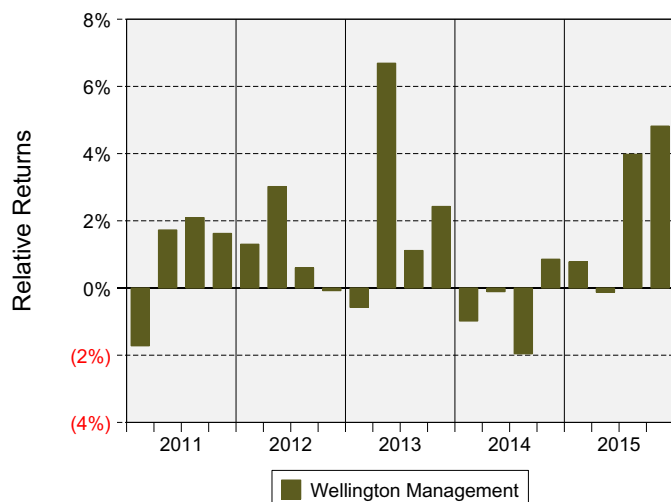
### Quarterly Asset Growth

Beginning Market Value	\$86,016,884
Net New Investment	\$-184,799
Investment Gains/(Losses)	\$9,307,652
Ending Market Value	\$95,139,737

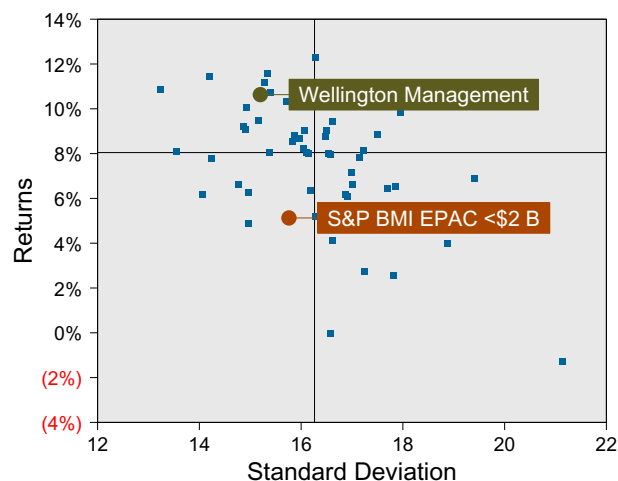
### Performance vs CAI International Small Cap Style (Gross)



### Relative Return vs S&P BMI EPAC <\$2 B



### CAI International Small Cap Style (Gross) Annualized Five Year Risk vs Return



## Axiom Emerging Markets Period Ended December 31, 2015

### Investment Philosophy

The Emerging Markets Equity strategy seeks to invest in emerging market securities issued by companies whose key business drivers are both improving and exceeding expectations, as determined by Axiom's stock selection techniques focused on fundamental company analysis. The strategy considers companies either (i) located in countries that are not included in the MSCI Developed Markets Index series or (ii) that derive a majority of their revenues or assets from a country or countries not included in the MSCI Developed Markets Index series, in each case at the time of investment. Although the Manager generally expects the strategy's investment portfolio to be geographically diverse, there are no prescribed limits on geographic distribution of the strategy's investments and the strategy has the authority to invest in securities traded in securities markets or any country in the world.

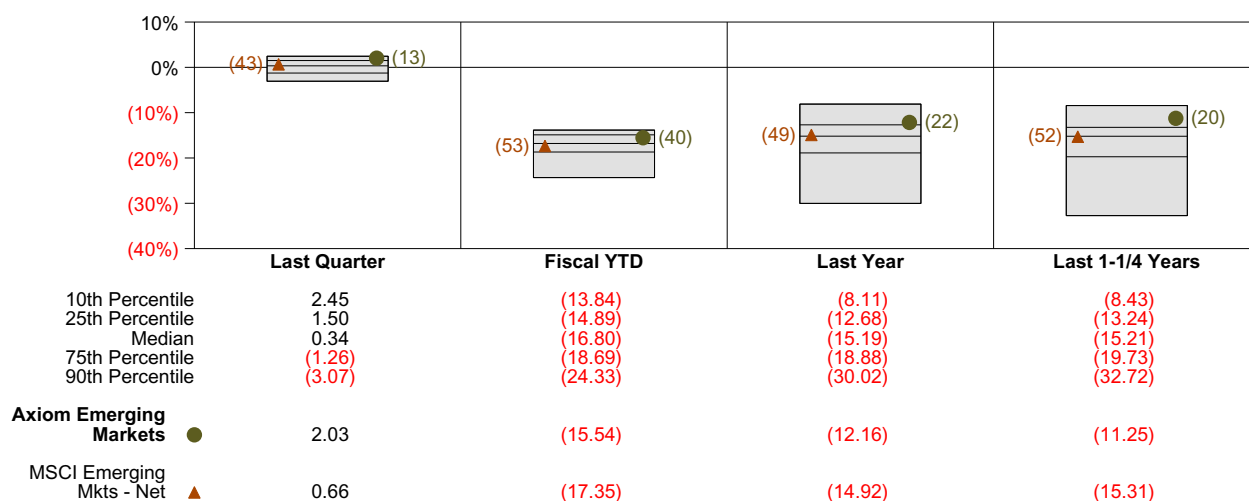
### Quarterly Summary and Highlights

- Axiom Emerging Markets's portfolio posted a 2.03% return for the quarter placing it in the 13 percentile of the CAI MF - Emerging Markets Style group for the quarter and in the 22 percentile for the last year.
- Axiom Emerging Markets's portfolio outperformed the MSCI Emerging Mkts - Net by 1.37% for the quarter and outperformed the MSCI Emerging Mkts - Net for the year by 2.76%.

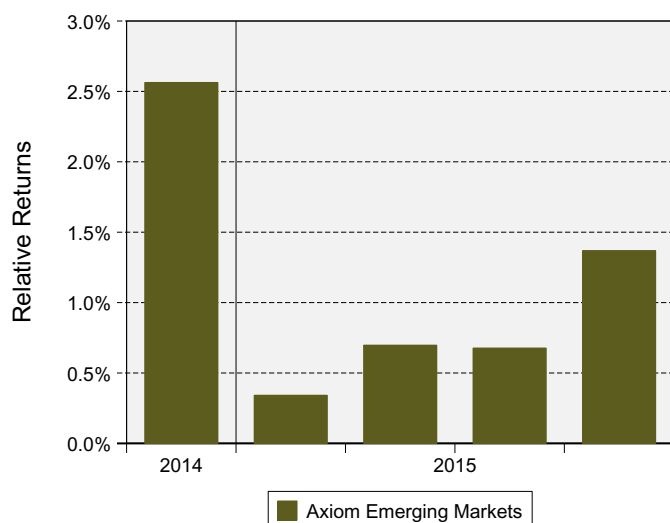
### Quarterly Asset Growth

Beginning Market Value	\$97,570,068
Net New Investment	\$16,750,000
Investment Gains/(Losses)	\$1,566,667
Ending Market Value	\$115,886,735

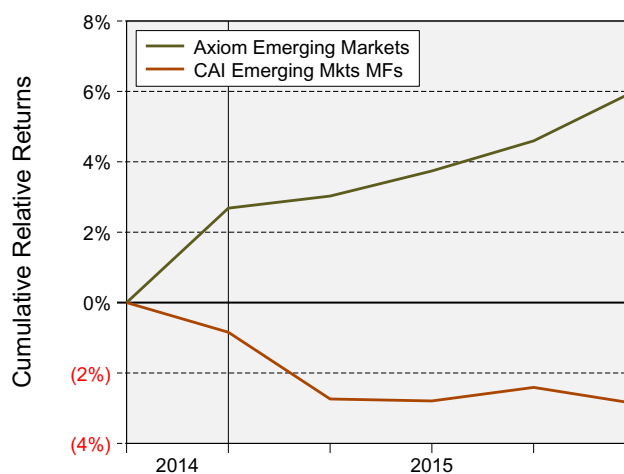
### Performance vs CAI MF - Emerging Markets Style (Net)



### Relative Return vs MSCI Emerging Mkts - Net



### Cumulative Returns vs MSCI Emerging Mkts - Net



## DFA Emerging Markets Period Ended December 31, 2015

### Investment Philosophy

The Emerging Markets Small Cap Portfolio invests in small cap emerging markets companies. Presently, this means investment in companies whose market capitalization is less than \$2.3 billion at the time of purchase. Dimensional considers, among other things, information disseminated by the International Finance Corporation in determining and approving emerging market countries.

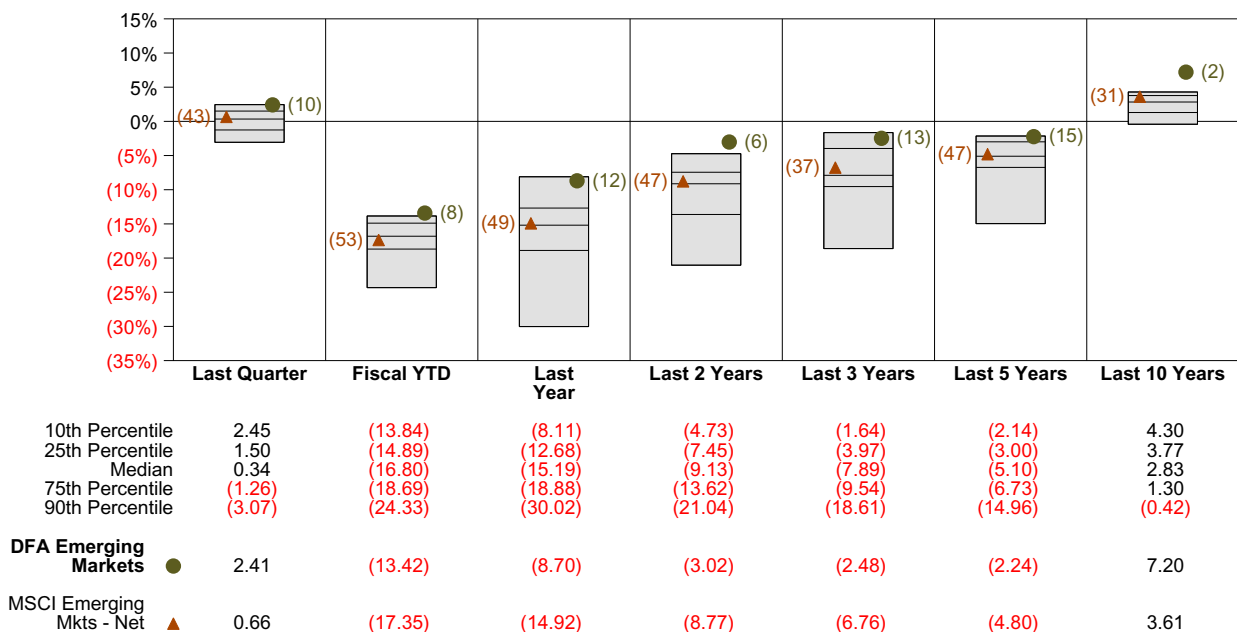
### Quarterly Summary and Highlights

- DFA Emerging Markets's portfolio posted a 2.41% return for the quarter placing it in the 10 percentile of the CAI MF - Emerging Markets Style group for the quarter and in the 12 percentile for the last year.
- DFA Emerging Markets's portfolio outperformed the MSCI Emerging Mkts - Net by 1.75% for the quarter and outperformed the MSCI Emerging Mkts - Net for the year by 6.22%.

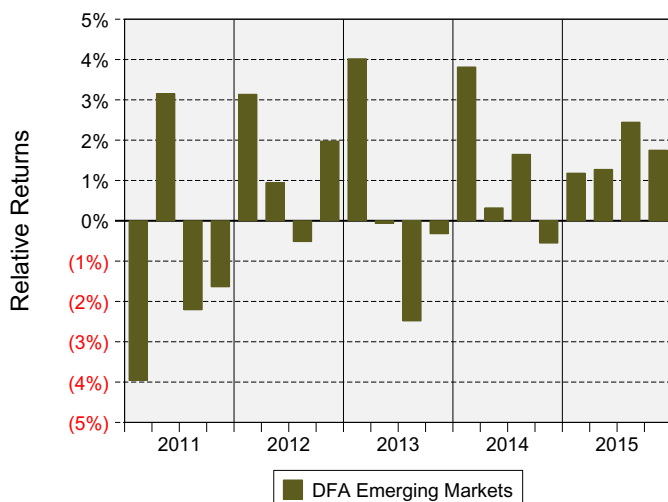
### Quarterly Asset Growth

Beginning Market Value	\$32,961,360
Net New Investment	\$5,750,000
Investment Gains/(Losses)	\$634,548
Ending Market Value	\$39,345,908

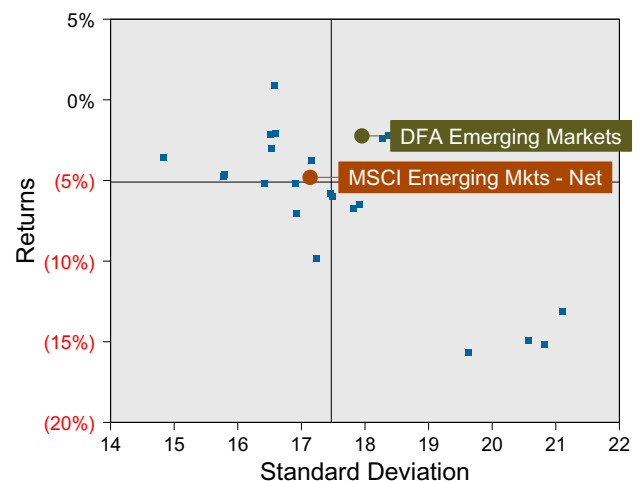
### Performance vs CAI MF - Emerging Markets Style (Net)



### Relative Return vs MSCI Emerging Mkts - Net



### CAI MF - Emerging Markets Style (Net) Annualized Five Year Risk vs Return





## EPOCH Investment Period Ended December 31, 2015

### Investment Philosophy

Epoch seeks to produce superior risk adjusted returns by building portfolios of businesses with outstanding risk/reward profiles without running a high degree of capital risk. They analyze businesses in the same manner private investors would in looking to purchase the entire company. The strategy only invests in businesses that are understood and where they have confidence in the financial statements. They seek businesses that generate "free cash flow" and securities that have unrecognized potential yet possess a combination of above average yield, above average free cash flow growth, and/or below average valuation. Global Choice is a "best ideas" portfolio at Epoch with every stock held in other strategies managed by the firm. **The EPOCH Blended Benchmark consists of the S&P 500 Index through 12/31/2011 and the MSCI World Index thereafter.**

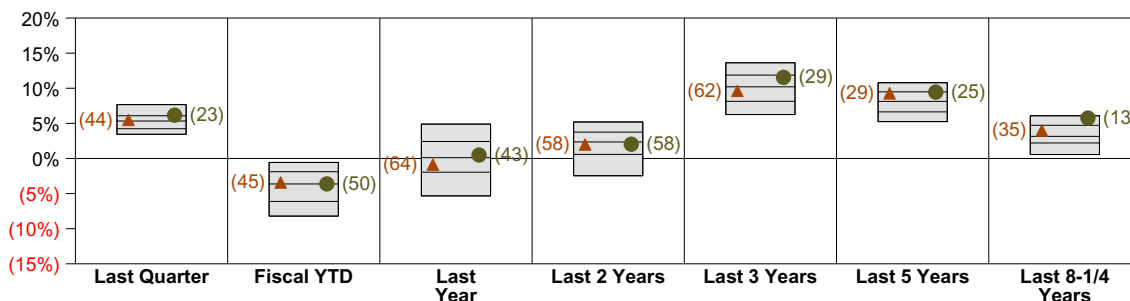
### Quarterly Summary and Highlights

- EPOCH Investment's portfolio posted a 6.16% return for the quarter placing it in the 23 percentile of the CAI Global Equity Broad Style group for the quarter and in the 43 percentile for the last year.
- EPOCH Investment's portfolio outperformed the EPOCH Blended Benchmark by 0.66% for the quarter and outperformed the EPOCH Blended Benchmark for the year by 1.36%.

### Quarterly Asset Growth

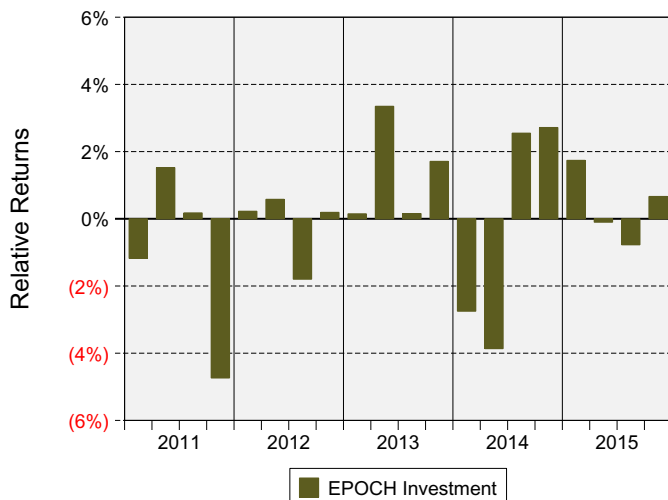
Beginning Market Value	\$298,730,960
Net New Investment	\$9,115,039
Investment Gains/(Losses)	\$18,353,224
Ending Market Value	\$326,199,223

### Performance vs CAI Global Equity Broad Style (Gross)

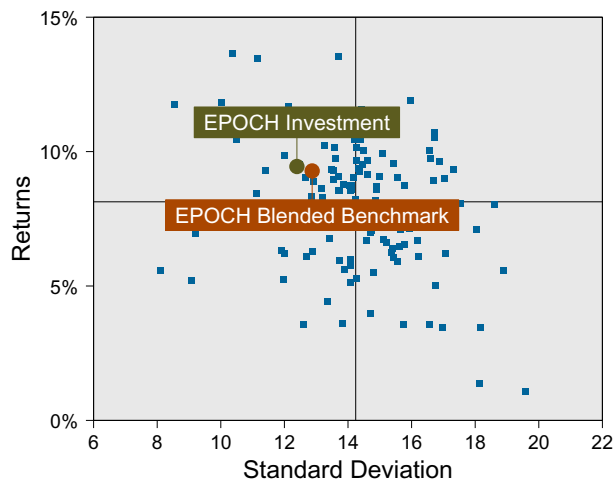


10th Percentile	7.67	(0.57)	4.90	5.20	13.63	10.79	6.08
25th Percentile	6.09	(1.88)	2.42	3.75	11.87	9.49	4.72
Median	5.34	(3.63)	0.11	2.35	10.20	8.13	3.15
75th Percentile	4.24	(6.12)	(1.96)	0.58	8.14	6.63	2.21
90th Percentile	3.44	(8.21)	(5.33)	(2.46)	6.26	5.25	0.56
<b>EPOCH Investment</b>	<b>6.16</b>	<b>(3.63)</b>	<b>0.49</b>	<b>2.03</b>	<b>11.55</b>	<b>9.45</b>	<b>5.75</b>
<b>EPOCH Blended Benchmark</b>	<b>5.50</b>	<b>(3.41)</b>	<b>(0.87)</b>	<b>1.99</b>	<b>9.63</b>	<b>9.28</b>	<b>3.99</b>

### Relative Returns vs EPOCH Blended Benchmark



### CAI Global Equity Broad Style (Gross) Annualized Five Year Risk vs Return



# LSV Asset Management

## Period Ended December 31, 2015

### Investment Philosophy

The Global Value (ACWI) Equity strategy is managed using quantitative techniques to select individual securities in a risk-controlled, bottom-up approach. Value factors and security selection dominate sector/industry factors as explanators of performance.

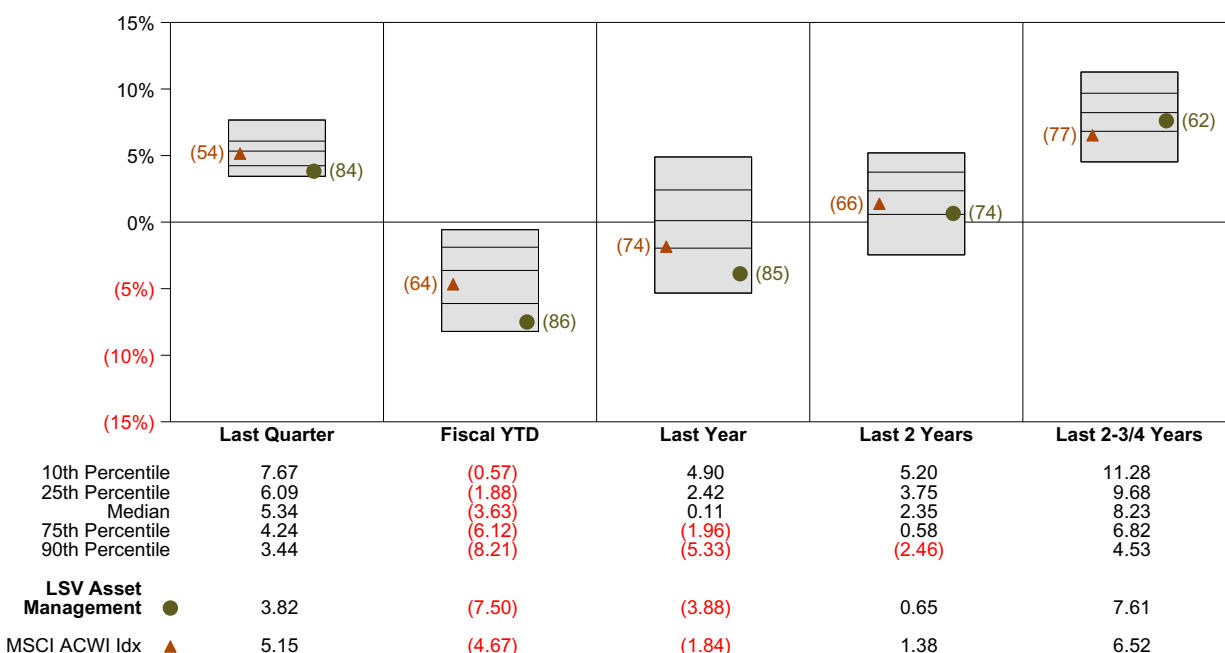
### Quarterly Summary and Highlights

- LSV Asset Management's portfolio posted a 3.82% return for the quarter placing it in the 84 percentile of the CAI Global Equity Broad Style group for the quarter and in the 85 percentile for the last year.
- LSV Asset Management's portfolio underperformed the MSCI ACWI Idx by 1.32% for the quarter and underperformed the MSCI ACWI Idx for the year by 2.04%.

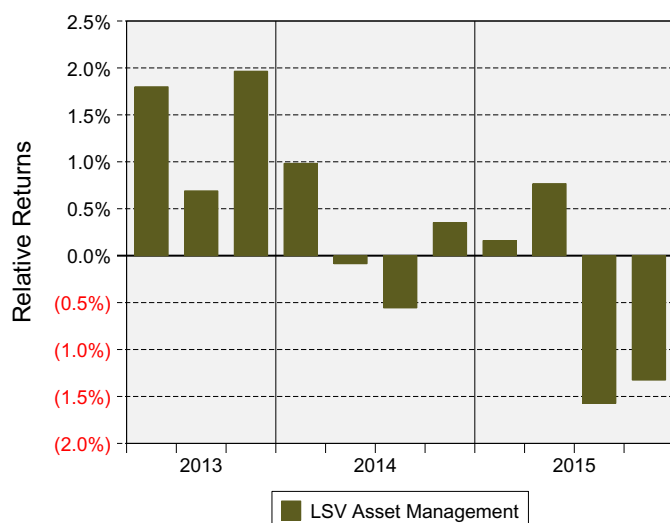
### Quarterly Asset Growth

Beginning Market Value	\$381,019,357
Net New Investment	\$13,804,315
Investment Gains/(Losses)	\$13,960,669
Ending Market Value	\$408,784,341

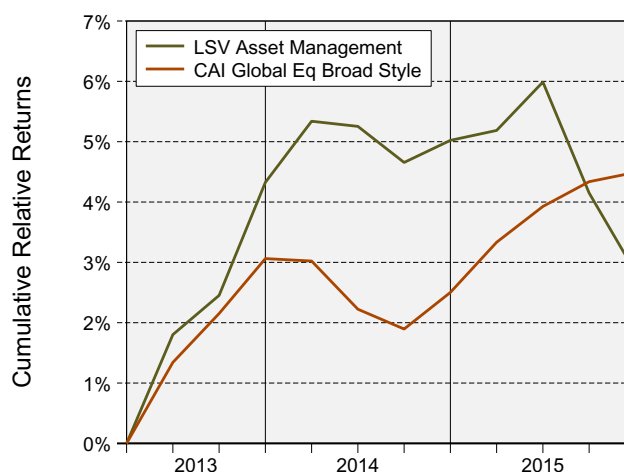
### Performance vs CAI Global Equity Broad Style (Gross)



### Relative Return vs MSCI ACWI Idx



### Cumulative Returns vs MSCI ACWI Idx





## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 26-3/4 Years
<b>Private Equity</b>	<b>(3.57%)</b>	<b>(8.24%)</b>	<b>(0.21%)</b>	<b>2.54%</b>	<b>8.21%</b>
Adams Street Direct Co-Invest Fd	6.06%	14.72%	21.13%	16.67%	-
Adams Street Direct Fd 2010	7.70%	16.78%	18.21%	14.44%	-
Adams Street 1998 Partnership	1.64%	3.06%	4.60%	1.82%	-
Adams Street 1999 Partnership	7.01%	(4.97%)	2.14%	4.56%	-
Adams Street 2000 Partnership	(2.10%)	(5.47%)	(1.36%)	3.83%	-
Adams Street 2001 Partnership	(7.25%)	(8.82%)	4.49%	6.94%	-
Adams Street 2002 Partnership	(1.79%)	(8.63%)	(0.74%)	5.25%	-
Adams Street 2003 Partnership	(3.01%)	8.61%	14.60%	9.60%	-
Adams Street 2010 Partnership	6.21%	18.39%	15.62%	13.89%	-
Adams Street 2008 Fund	8.80%	12.65%	13.43%	10.28%	-
Adams Street 1999 Non-US	15.12%	7.26%	6.40%	13.32%	-
Adams Street 2000 Non-US	(5.83%)	(0.73%)	(2.23%)	(0.01%)	-
Adams Street 2001 Non-US	(9.04%)	56.16%	29.70%	15.62%	-
Adams Street 2002 Non-US	13.32%	12.08%	3.83%	6.25%	-
Adams Street 2003 Non-US	2.76%	15.79%	10.51%	10.11%	-
Adams Street 2004 Non-US	(5.10%)	3.14%	8.95%	7.31%	-
Adams Street 2010 Non-US	6.67%	4.52%	7.00%	4.49%	-
Adams Street 2010 NonUS Emg	6.99%	17.30%	9.56%	(3.18%)	-
Adams Street BVCF IV Fund	(1.56%)	7.53%	31.60%	37.30%	-
CorsAir III	38.19%	24.21%	6.33%	2.76%	-
ND Investors	(0.23%)	(5.28%)	0.46%	1.17%	-
CorsAir IV	(4.27%)	16.78%	16.93%	5.52%	-
Capital International V	(25.36%)	(32.87%)	(13.43%)	(3.63%)	-
Capital International VI	(8.30%)	(23.20%)	(17.66%)	-	-
EIG Energy Fund XIV	(19.35%)	(37.12%)	(16.11%)	(7.59%)	-
Lewis & Clark	0.00%	(32.09%)	(13.56%)	(5.81%)	-
Lewis & Clark II	0.00%	(14.35%)	(8.65%)	(7.39%)	-
Quantum Energy Partners	(11.57%)	(36.79%)	1.68%	9.64%	-
Matlin Patterson I	0.00%	0.00%	(1.77%)	641.83%	-
Matlin Patterson II	6.51%	26.60%	(1.41%)	(34.33%)	-
Matlin Patterson III	(4.67%)	1.22%	3.17%	23.57%	-
Russell 1000 Index	6.50%	0.92%	15.01%	12.44%	9.99%
Russell 2000 Index	3.59%	(4.41%)	11.65%	9.19%	9.21%



## Declaration Total Return Period Ended December 31, 2015

### Investment Philosophy

The Fund's portfolio holdings consist primarily of RMBS issued by private sector companies (Non-Agency RMBS) and government agencies (Agency MBS) and CMBS issued by private sector companies. Agency MBS includes securities issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Government National Mortgage Association (Ginnie Mae). Portfolio holdings may range from short tenure senior classes to stressed issues or subordinated securities with substantial risk of non-payment and correspondingly higher yields. Smaller portfolio allocations may include consumer asset-backed securities (ABS), or other structured credit securities and corporate bonds. As a diversification strategy and a potential hedge to credit risk, the Fund may invest in securities which tend to benefit from slow mortgage prepayments and economic growth, such as interest only (IO) MBS.

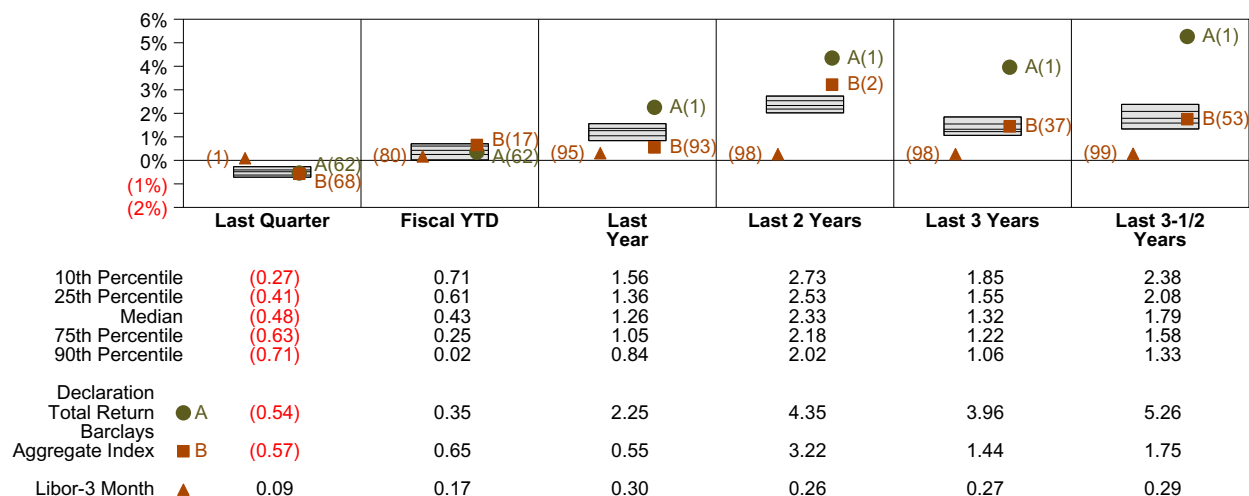
### Quarterly Summary and Highlights

- Declaration Total Return's portfolio posted a (0.54)% return for the quarter placing it in the 62 percentile of the CAI Intermediate Fixed-Inc Style group for the quarter and in the 1 percentile for the last year.
- Declaration Total Return's portfolio underperformed the Libor-3 Month by 0.63% for the quarter and outperformed the Libor-3 Month for the year by 1.95%.

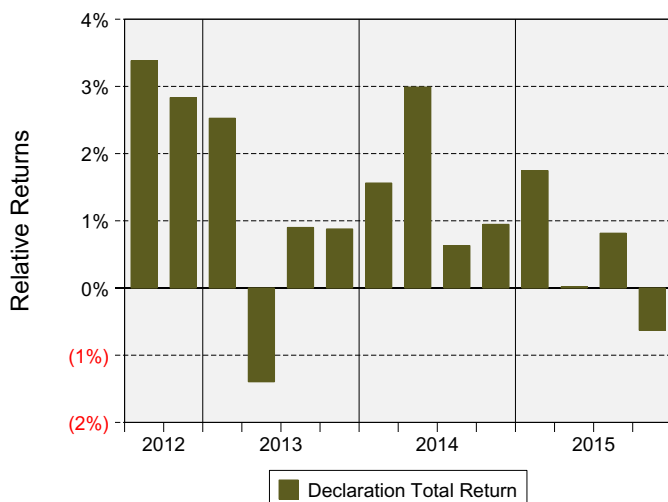
### Quarterly Asset Growth

Beginning Market Value	\$85,214,474
Net New Investment	\$-30,314
Investment Gains/(Losses)	\$-457,846
Ending Market Value	\$84,726,314

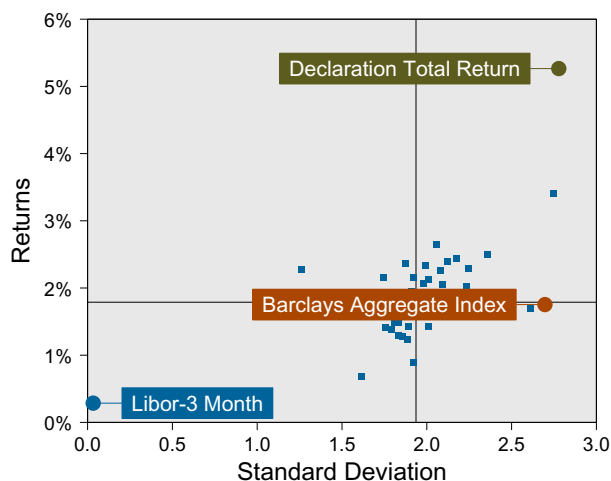
### Performance vs CAI Intermediate Fixed-Inc Style (Gross)



### Relative Return vs Libor-3 Month



### CAI Intermediate Fixed-Inc Style (Gross) Annualized Three and One-Half Year Risk vs Return



## J.P. Morgan MBS Period Ended December 31, 2015

### Investment Philosophy

JP Morgan seeks to outperform the benchmark over longer horizons regardless of the market environment.

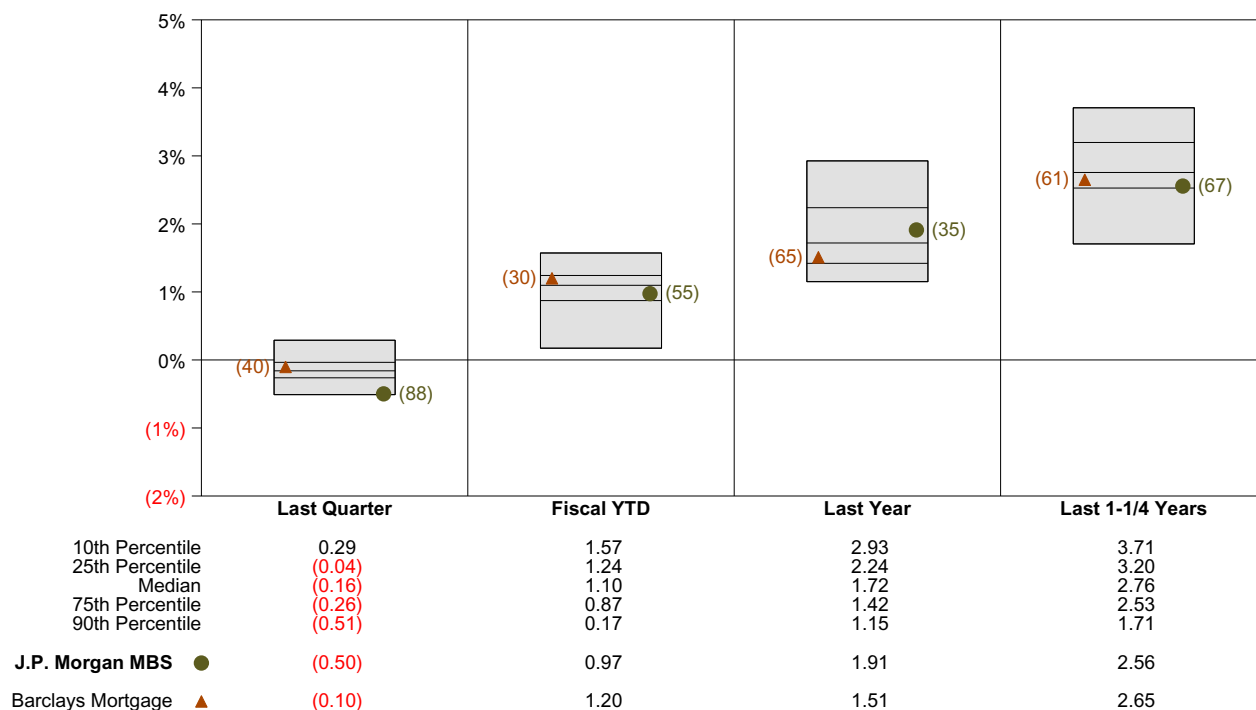
### Quarterly Summary and Highlights

- J.P. Morgan MBS's portfolio posted a (0.50)% return for the quarter placing it in the 88 percentile of the CAI Mtg-Backed FI Style group for the quarter and in the 35 percentile for the last year.
- J.P. Morgan MBS's portfolio underperformed the Barclays Mortgage by 0.40% for the quarter and outperformed the Barclays Mortgage for the year by 0.40%.

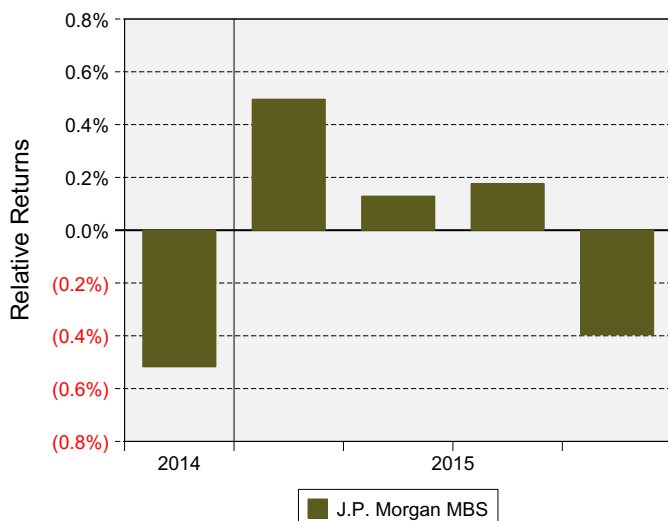
### Quarterly Asset Growth

Beginning Market Value	\$126,062,208
Net New Investment	\$-2,565,192
Investment Gains/(Losses)	\$-625,583
Ending Market Value	\$122,871,434

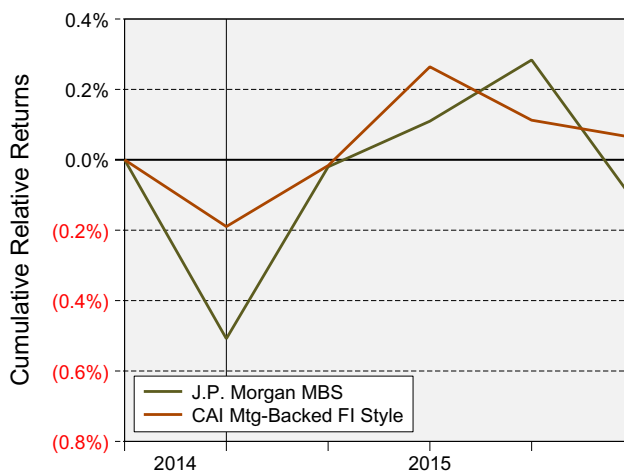
### Performance vs CAI Mtg-Backed FI Style (Gross)



### Relative Return vs Barclays Mortgage



### Cumulative Returns vs Barclays Mortgage



## PIMCO DiSCO II

### Period Ended December 31, 2015

#### Investment Philosophy

The PIMCO Distressed Senior Credit Opportunities Fund is an opportunistic private-equity style Fund which seeks to provide investors enhanced returns principally through long-biased investments in undervalued senior and super senior structured credit securities that are expected to produce attractive levels of current income and that may also appreciate in value over the long term. The fund will look to capitalize on forced sales by liquidity constrained investors.

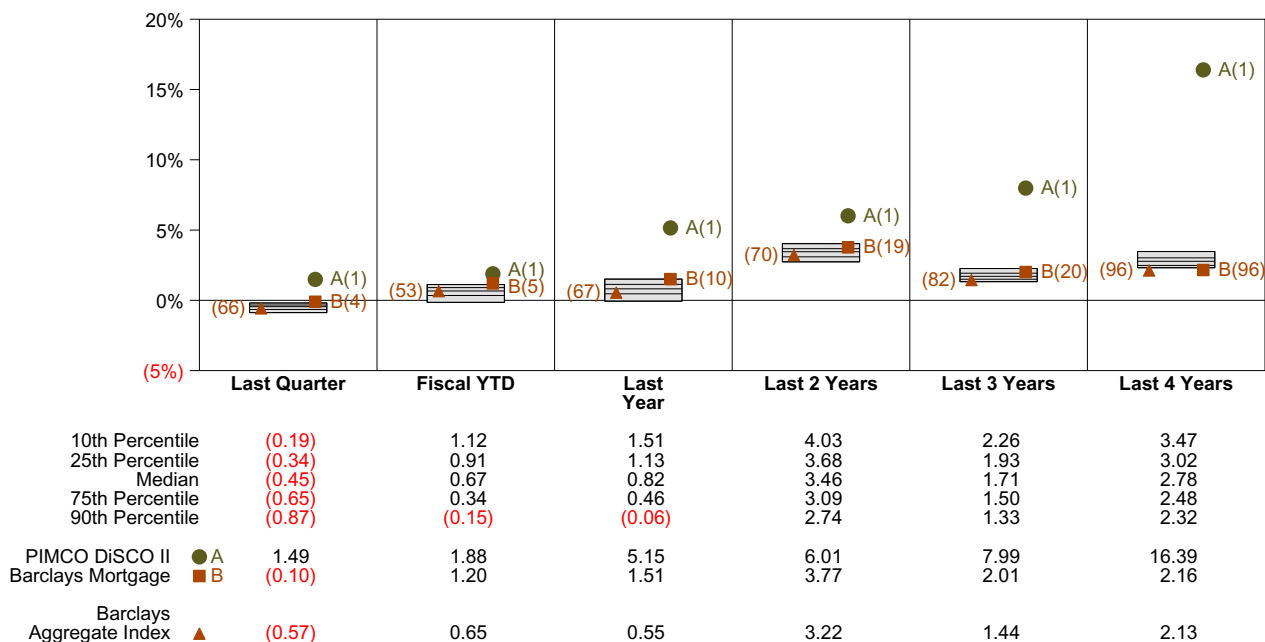
#### Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 1.49% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 1 percentile for the last year.
- PIMCO DiSCO II's portfolio outperformed the Barclays Aggregate Index by 2.06% for the quarter and outperformed the Barclays Aggregate Index for the year by 4.60%.

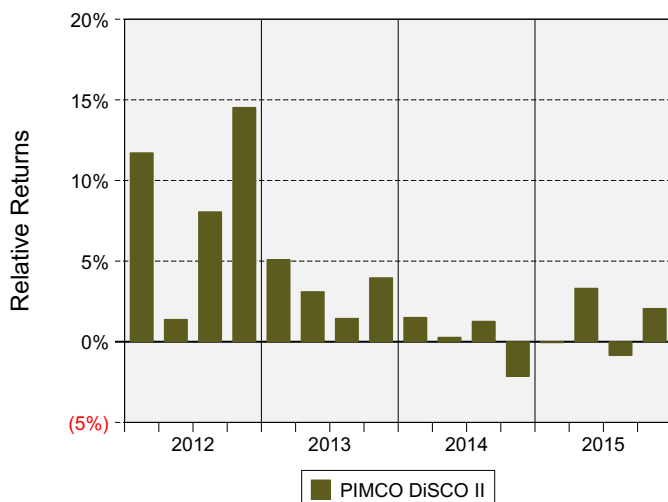
#### Quarterly Asset Growth

Beginning Market Value	\$88,200,007
Net New Investment	\$0
Investment Gains/(Losses)	\$1,313,099
Ending Market Value	\$89,513,106

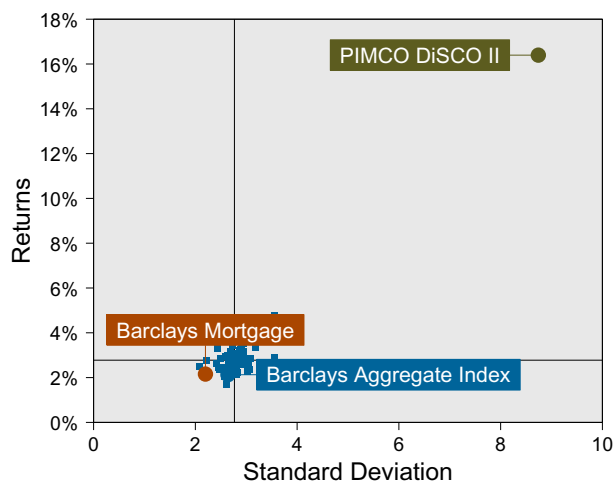
#### Performance vs CAI Core Bond Fixed-Inc Style (Gross)



#### Relative Return vs Barclays Aggregate Index



#### CAI Core Bond Fixed-Inc Style (Gross) Annualized Four Year Risk vs Return



## PIMCO MBS

### Period Ended December 31, 2015

#### Investment Philosophy

The PIMCO Mortgage-Backed Securities Strategy is an actively managed bond portfolio that invests in high quality, short to intermediate duration mortgage-backed securities. The fund invests primarily in securities that are highly rated, such as US Government guaranteed Ginnie Mae securities and Agency-guaranteed Fannie Mae and Freddie Mac mortgage-backed securities.

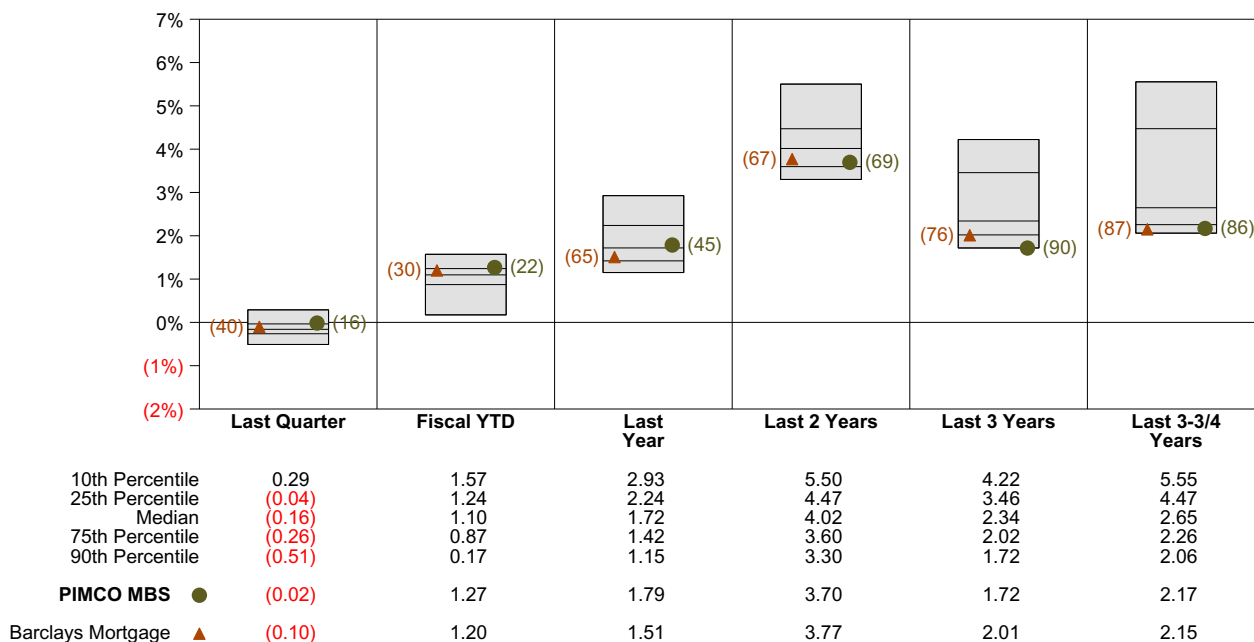
#### Quarterly Summary and Highlights

- PIMCO MBS's portfolio posted a (0.02)% return for the quarter placing it in the 16 percentile of the CAI Mtg-Backed FI Style group for the quarter and in the 45 percentile for the last year.
- PIMCO MBS's portfolio outperformed the Barclays Mortgage by 0.09% for the quarter and outperformed the Barclays Mortgage for the year by 0.28%.

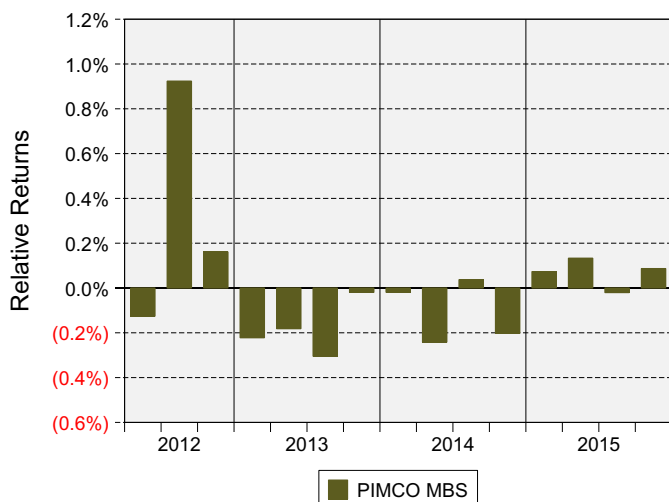
#### Quarterly Asset Growth

Beginning Market Value	\$181,424,321
Net New Investment	\$-18,225,000
Investment Gains/(Losses)	\$-28,226
Ending Market Value	\$163,171,095

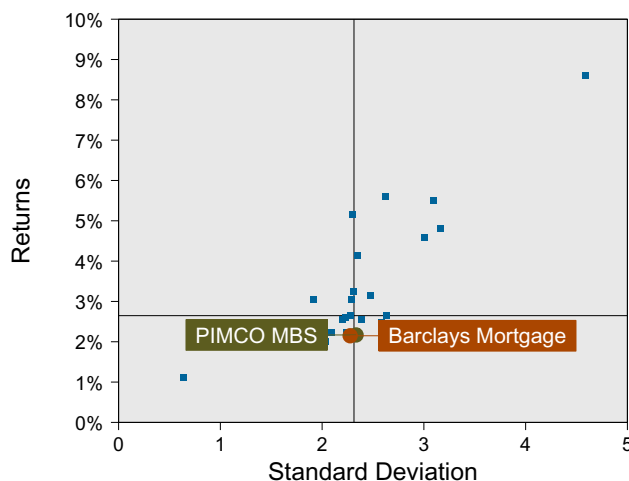
#### Performance vs CAI Mtg-Backed FI Style (Gross)



#### Relative Return vs Barclays Mortgage



#### CAI Mtg-Backed FI Style (Gross) Annualized Three and Three-Quarter Year Risk vs Return



## PIMCO Unconstrained Period Ended December 31, 2015

### Investment Philosophy

The PIMCO Unconstrained Bond Strategy is an absolute return-oriented, investment grade quality fixed income strategy that leverages PIMCO's secular thinking, global themes, and integrated investment process without the constraints of a benchmark or significant sector/instrument limitations. The strategy focuses on long-term economic, social and political trends. Over shorter cyclical time frames, the unconstrained nature of the strategy allows PIMCO to take on more risk when tactical opportunities are identified, and it allows for reduction and diversification of risk at times when the outlook may be more challenging for traditional fixed income benchmarks. **The product changed from Commingled Fund to Separate Account in March 2014.** \*Libor-3 month through February 28, 2014; Fund's performance through March 31, 2014; Libor-3 month thereafter.

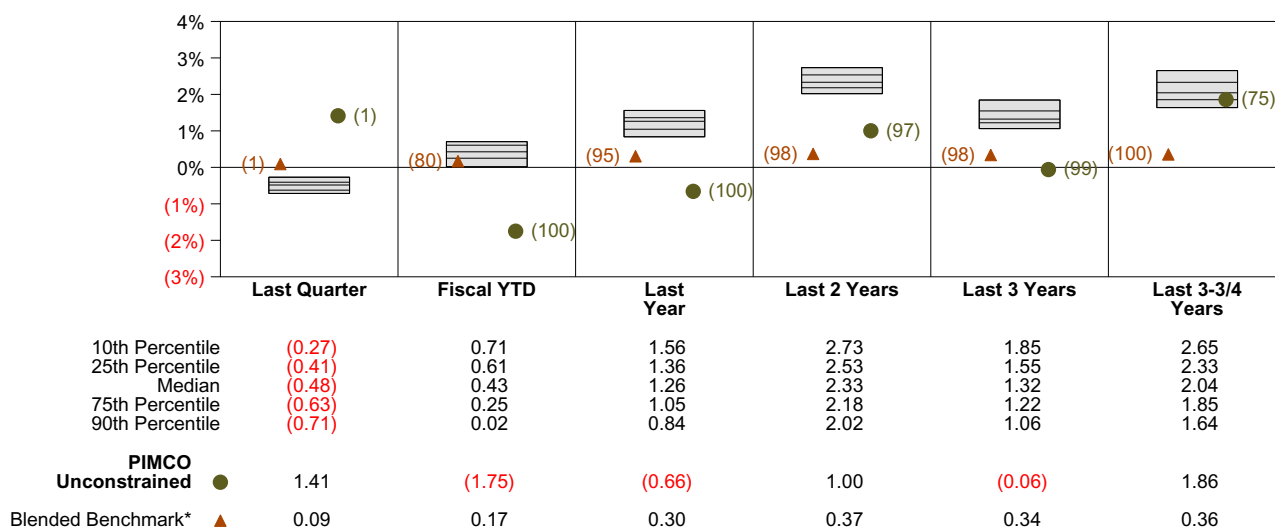
### Quarterly Summary and Highlights

- PIMCO Unconstrained's portfolio posted a 1.41% return for the quarter placing it in the 1 percentile of the CAI Intermediate Fixed-Inc Style group for the quarter and in the 100 percentile for the last year.
- PIMCO Unconstrained's portfolio outperformed the Blended Benchmark\* by 1.32% for the quarter and underperformed the Blended Benchmark\* for the year by 0.96%.

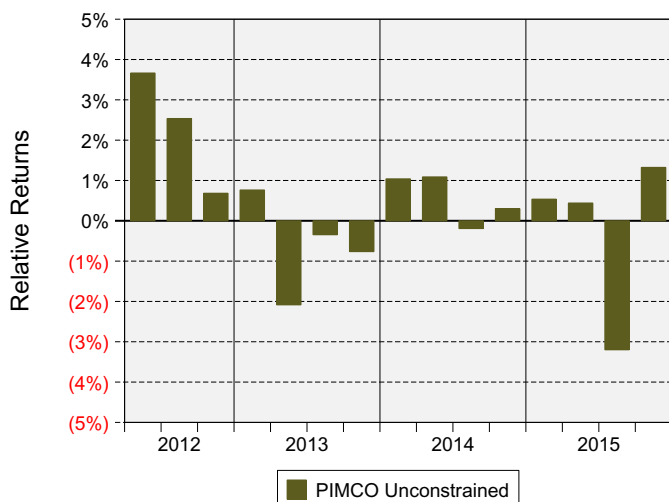
### Quarterly Asset Growth

Beginning Market Value	\$91,931,887
Net New Investment	\$-21,700,000
Investment Gains/(Losses)	\$1,271,386
Ending Market Value	\$71,503,274

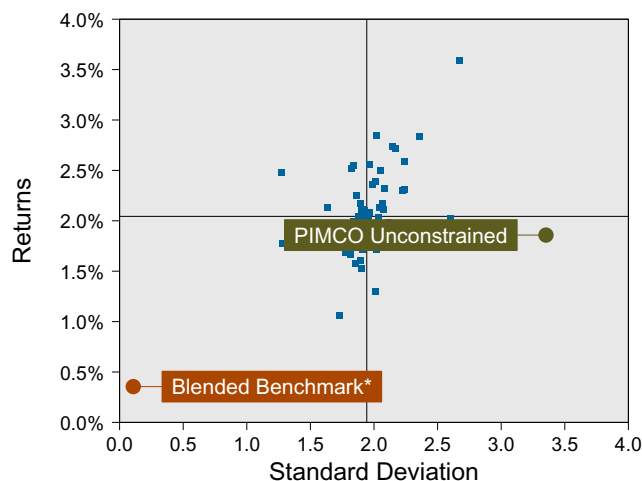
### Performance vs CAI Intermediate Fixed-Inc Style (Gross)



### Relative Return vs Blended Benchmark\*



### CAI Intermediate Fixed-Inc Style (Gross) Annualized Three and Three-Quarter Year Risk vs Return



# SSgA Long US Treas Index Period Ended December 31, 2015

## Investment Philosophy

The Fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Barclays Capital U.S. Long Treasury Bond Index over the long term.

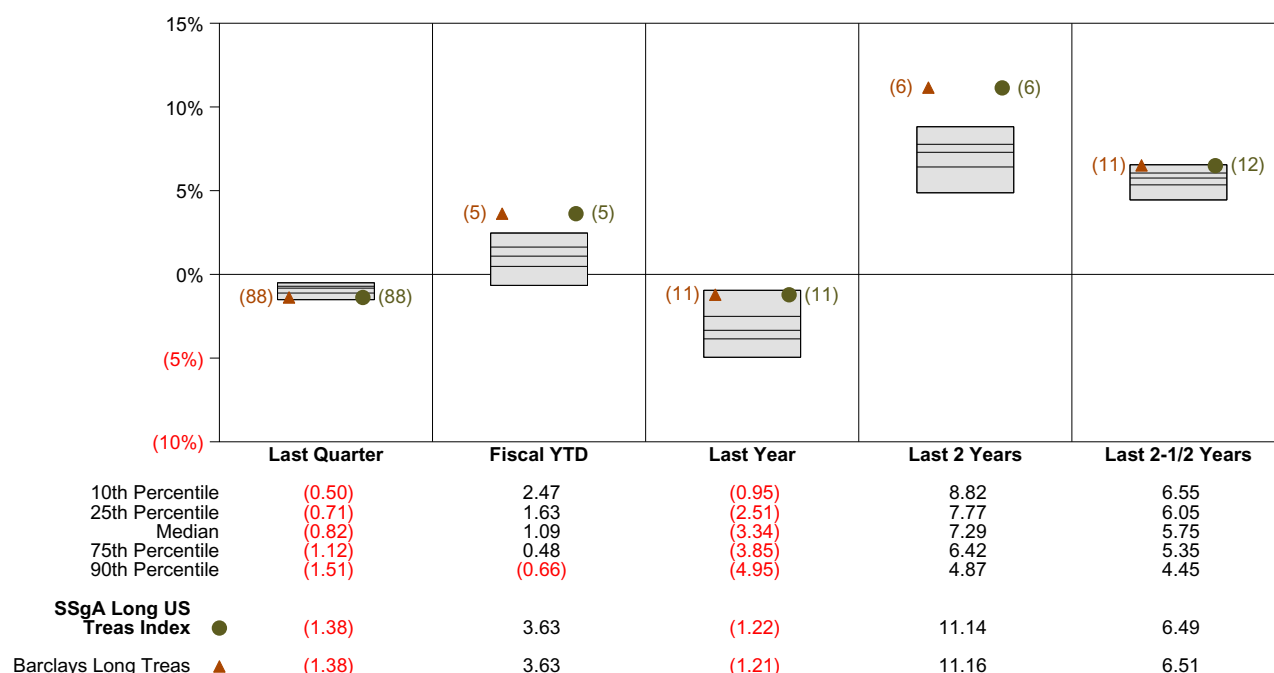
## Quarterly Summary and Highlights

- SSgA Long US Treas Index's portfolio posted a (1.38)% return for the quarter placing it in the 88 percentile of the CAI Extended Maturity Fixed-Inc Style group for the quarter and in the 11 percentile for the last year.
- SSgA Long US Treas Index's portfolio underperformed the Barclays Long Treas by 0.00% for the quarter and underperformed the Barclays Long Treas for the year by 0.01%.

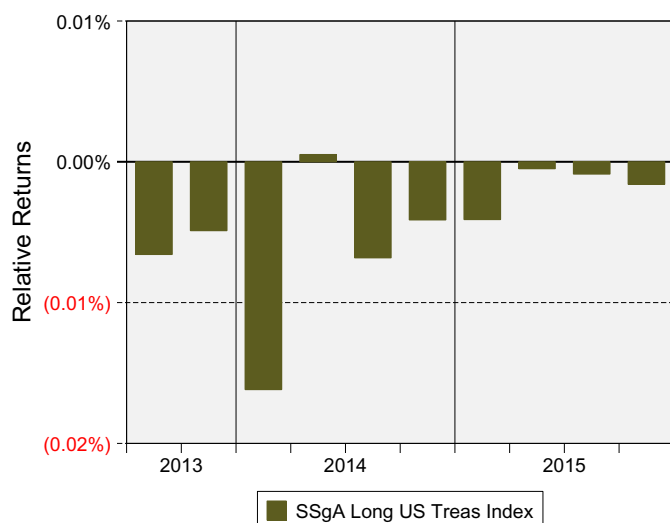
## Quarterly Asset Growth

Beginning Market Value	\$92,918,584
Net New Investment	\$-32,122,771
Investment Gains/(Losses)	\$-725,306
Ending Market Value	\$60,070,508

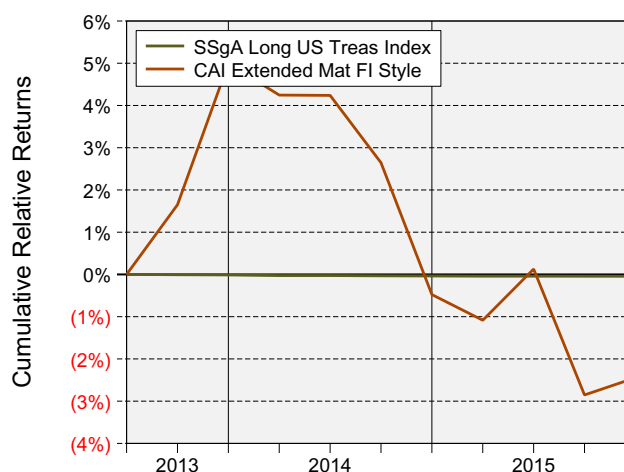
## Performance vs CAI Extended Maturity Fixed-Inc Style (Gross)



## Relative Return vs Barclays Long Treas



## Cumulative Returns vs Barclays Long Treas



## Goldman Sachs 2006 Offshore Period Ended December 31, 2015

### Investment Philosophy

GS Mezzanine Partners seeks large-sized mezzanine investments comprised generally of fixed income securities and an associated equity component. They focus on providing "private high yield" capital for mid- to large-sized leveraged and management buyout transactions, recapitalizations, financings, re-financings, acquisitions and restructurings for private equity firms, private family companies and corporate issuers.

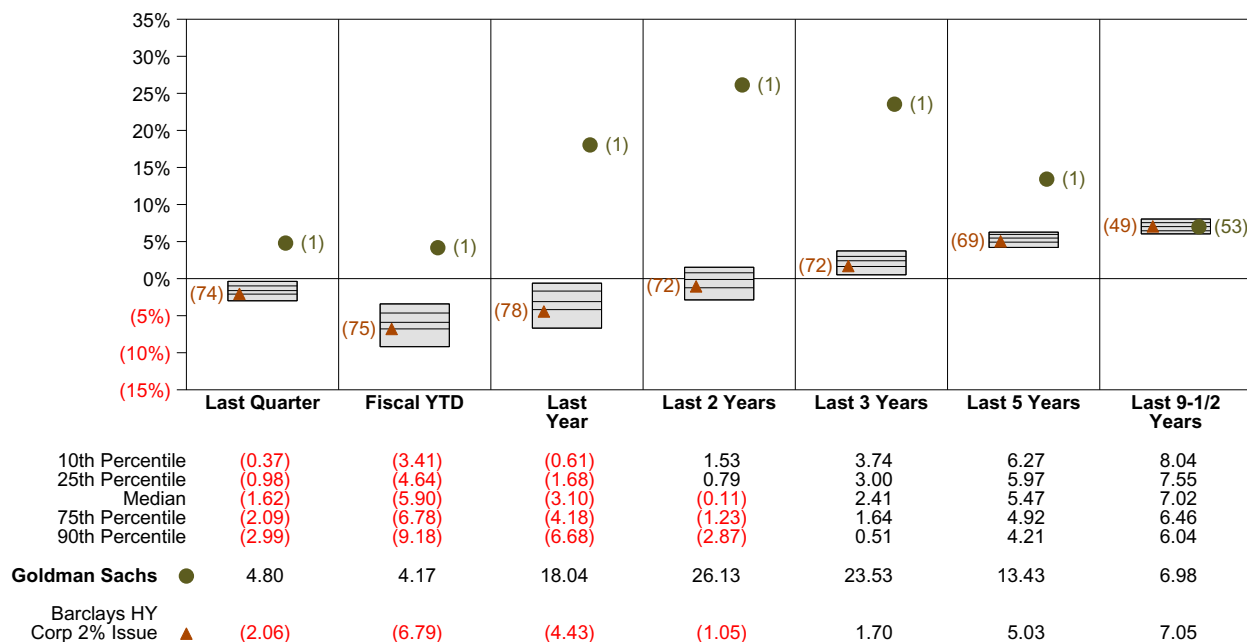
### Quarterly Summary and Highlights

- Goldman Sachs's portfolio posted a 4.80% return for the quarter placing it in the 1 percentile of the CAI High Yield Fixed-Inc Style group for the quarter and in the 1 percentile for the last year.
- Goldman Sachs's portfolio outperformed the Barclays HY Corp 2% Issue by 6.85% for the quarter and outperformed the Barclays HY Corp 2% Issue for the year by 22.47%.

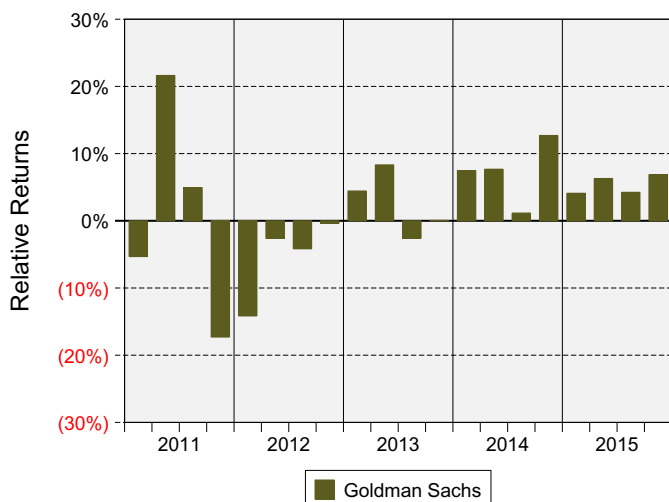
### Quarterly Asset Growth

Beginning Market Value	\$1,410,917
Net New Investment	\$-123,812
Investment Gains/(Losses)	\$61,746
Ending Market Value	\$1,348,851

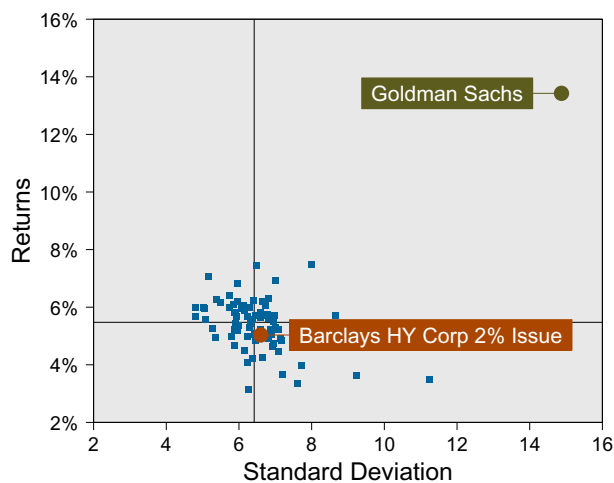
### Performance vs CAI High Yield Fixed-Inc Style (Gross)



### Relative Return vs Barclays HY Corp 2% Issue



### CAI High Yield Fixed-Inc Style (Gross) Annualized Five Year Risk vs Return



## Goldman Sachs Offshore Fund V Period Ended December 31, 2015

### Investment Philosophy

GS Mezzanine Partners seeks large-sized mezzanine investments comprised generally of fixed income securities and an associated equity component. They focus on providing "private high yield" capital for mid- to large-sized leveraged and management buyout transactions, recapitalizations, financings, re-financings, acquisitions and restructurings for private equity firms, private family companies and corporate issuers.

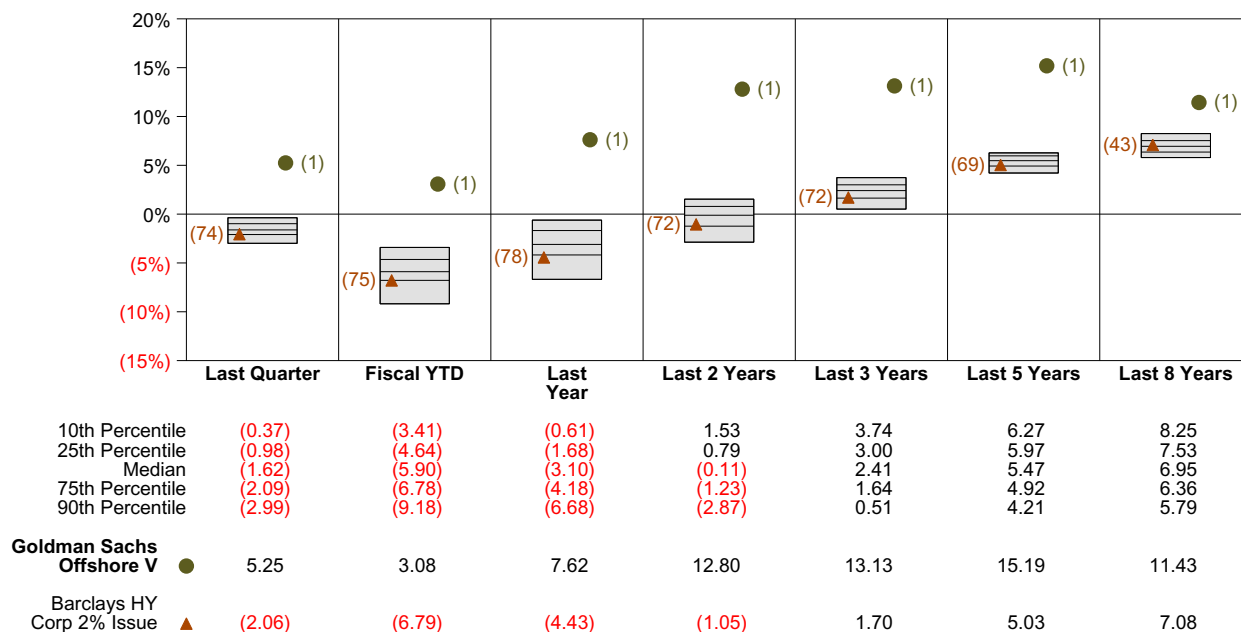
### Quarterly Summary and Highlights

- Goldman Sachs Offshore V's portfolio posted a 5.25% return for the quarter placing it in the 1 percentile of the CAI High Yield Fixed-Inc Style group for the quarter and in the 1 percentile for the last year.
- Goldman Sachs Offshore V's portfolio outperformed the Barclays HY Corp 2% Issue by 7.30% for the quarter and outperformed the Barclays HY Corp 2% Issue for the year by 12.05%.

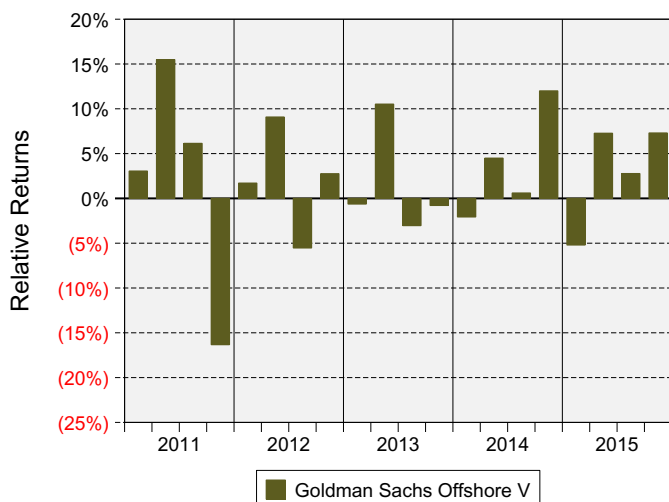
### Quarterly Asset Growth

Beginning Market Value	\$2,921,771
Net New Investment	\$-252,293
Investment Gains/(Losses)	\$140,026
Ending Market Value	\$2,809,504

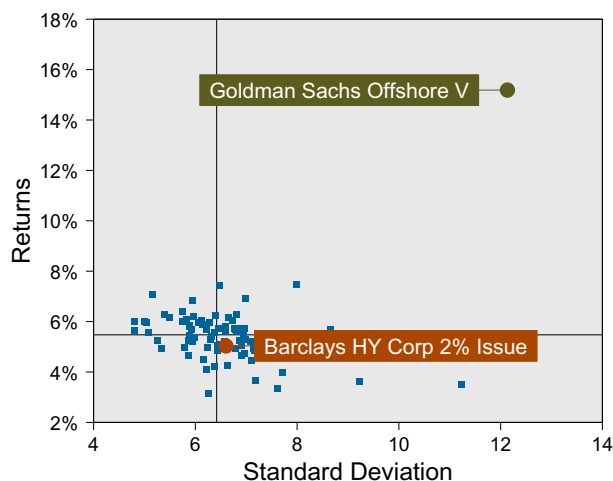
### Performance vs CAI High Yield Fixed-Inc Style (Gross)



### Relative Return vs Barclays HY Corp 2% Issue



### CAI High Yield Fixed-Inc Style (Gross) Annualized Five Year Risk vs Return



## Loomis Sayles Period Ended December 31, 2015

### Investment Philosophy

The High Yield Full Discretion Strategy seeks to identify attractive sectors and specific investment opportunities primarily within the global fixed income market through a global economic and interest rate framework. Portfolio managers incorporate a long-term macroeconomic view along with a stringent bottom-up investment evaluation process that drives security selection and resulting sector allocations. Opportunistic investments in non-benchmark sectors including investment grade corporate, emerging market, and non-US dollar debt and convertible bonds help to manage overall portfolio risk and enhance total return potential.

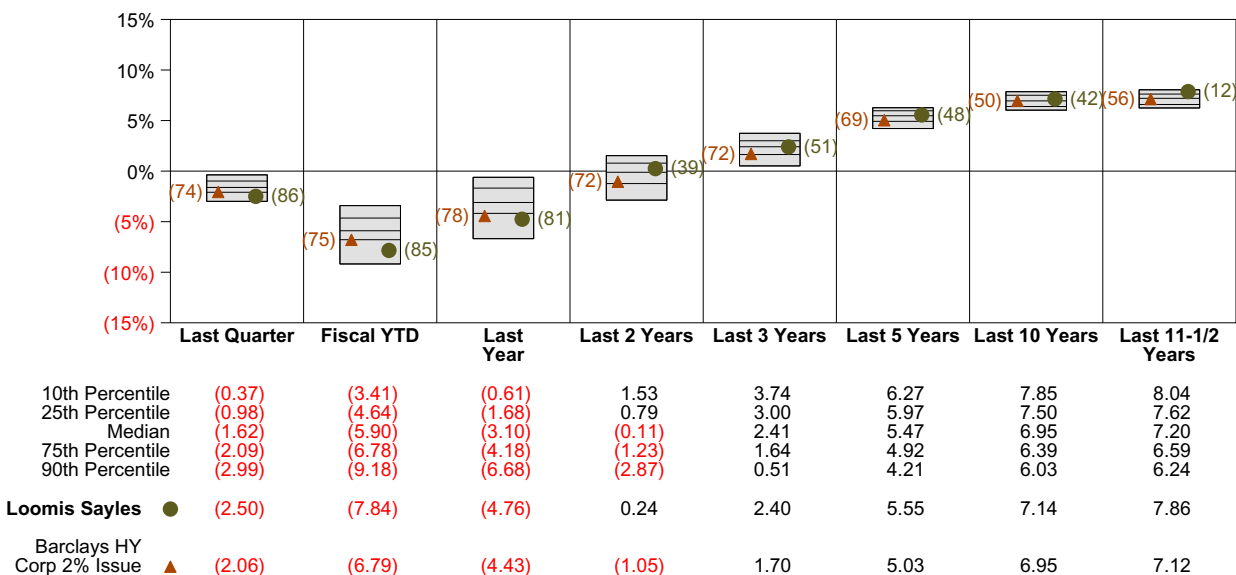
### Quarterly Summary and Highlights

- Loomis Sayles's portfolio posted a (2.50)% return for the quarter placing it in the 86 percentile of the CAI High Yield Fixed-Inc Style group for the quarter and in the 81 percentile for the last year.
- Loomis Sayles's portfolio underperformed the Barclays HY Corp 2% Issue by 0.44% for the quarter and underperformed the Barclays HY Corp 2% Issue for the year by 0.32%.

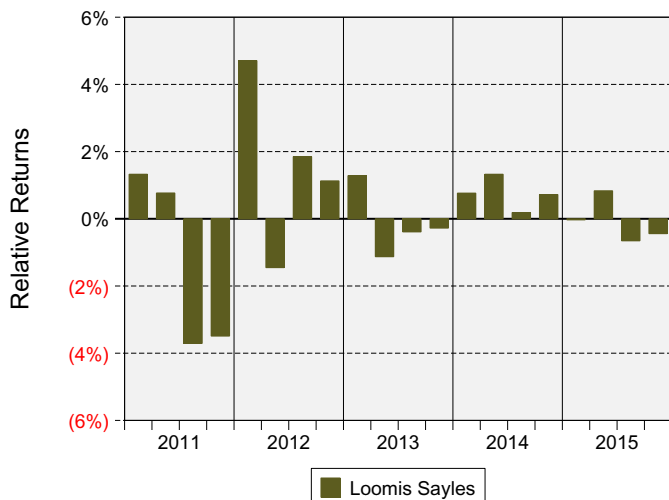
### Quarterly Asset Growth

Beginning Market Value	\$215,217,040
Net New Investment	\$-19,784,021
Investment Gains/(Losses)	\$-4,394,612
Ending Market Value	\$191,038,407

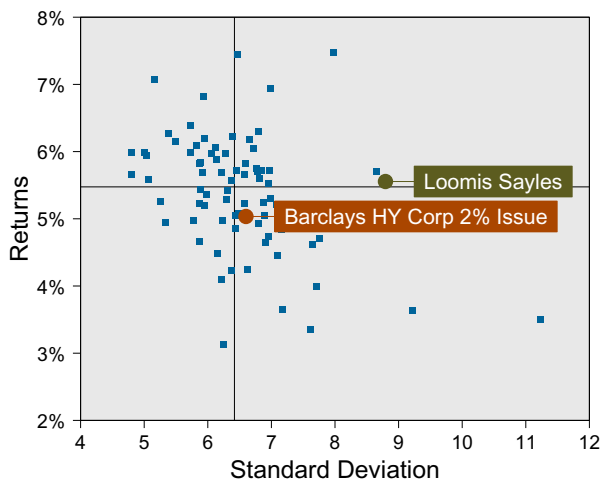
### Performance vs CAI High Yield Fixed-Inc Style (Gross)



### Relative Return vs Barclays HY Corp 2% Issue



### CAI High Yield Fixed-Inc Style (Gross) Annualized Five Year Risk vs Return



## PIMCO Bravo II Fund

### Period Ended December 31, 2015

#### Investment Philosophy

The BRAVO II Fund is a private equity style fund targeting an annualized IRR of 15-20% and multiple of 1.8-2x, net of fees and carried interest with an initial 5-year term. The fund will seek to capitalize on non-economic asset sale decisions by global financial institutions. The fund will have the flexibility to acquire attractively discounted, less liquid loans, structured credit and other assets tied to residential or commercial real estate markets in the U.S. and Europe.

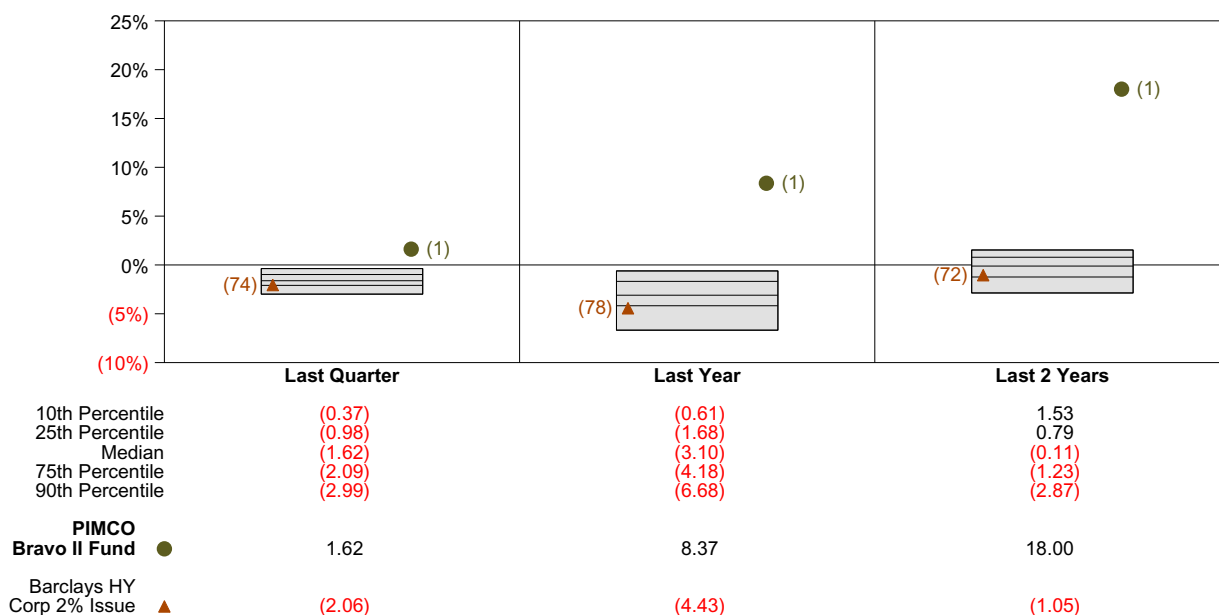
#### Quarterly Summary and Highlights

- PIMCO Bravo II Fund's portfolio posted a 1.62% return for the quarter placing it in the 1 percentile of the CAI High Yield Fixed-Inc Style group for the quarter and in the 1 percentile for the last year.
- PIMCO Bravo II Fund's portfolio outperformed the Barclays HY Corp 2% Issue by 3.68% for the quarter and outperformed the Barclays HY Corp 2% Issue for the year by 12.80%.

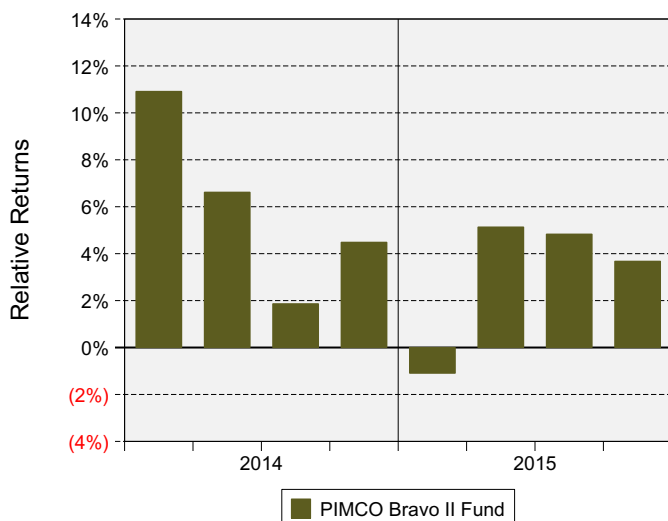
#### Quarterly Asset Growth

Beginning Market Value	\$35,384,594
Net New Investment	\$8,750,000
Investment Gains/(Losses)	\$572,767
Ending Market Value	\$44,707,361

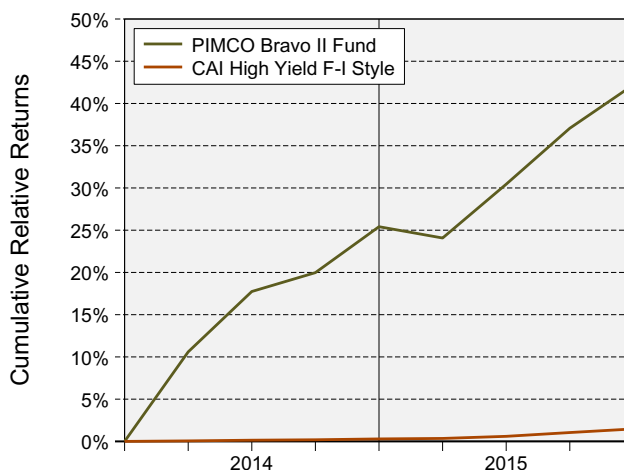
#### Performance vs CAI High Yield Fixed-Inc Style (Gross)



#### Relative Return vs Barclays HY Corp 2% Issue



#### Cumulative Returns vs Barclays HY Corp 2% Issue





## Brandywine Asset Management Period Ended December 31, 2015

### Investment Philosophy

Brandywine engages in a disciplined, active, value-driven, strategic approach. Their investment strategy concentrates on top-down analysis of macro-economic conditions in order to determine where the most attractive valuations exist. Specifically, they invest in bonds with the highest real yields globally. They manage currency to protect principal and increase returns, patiently rotated among countries and attempt to control risk by purchasing undervalued securities.

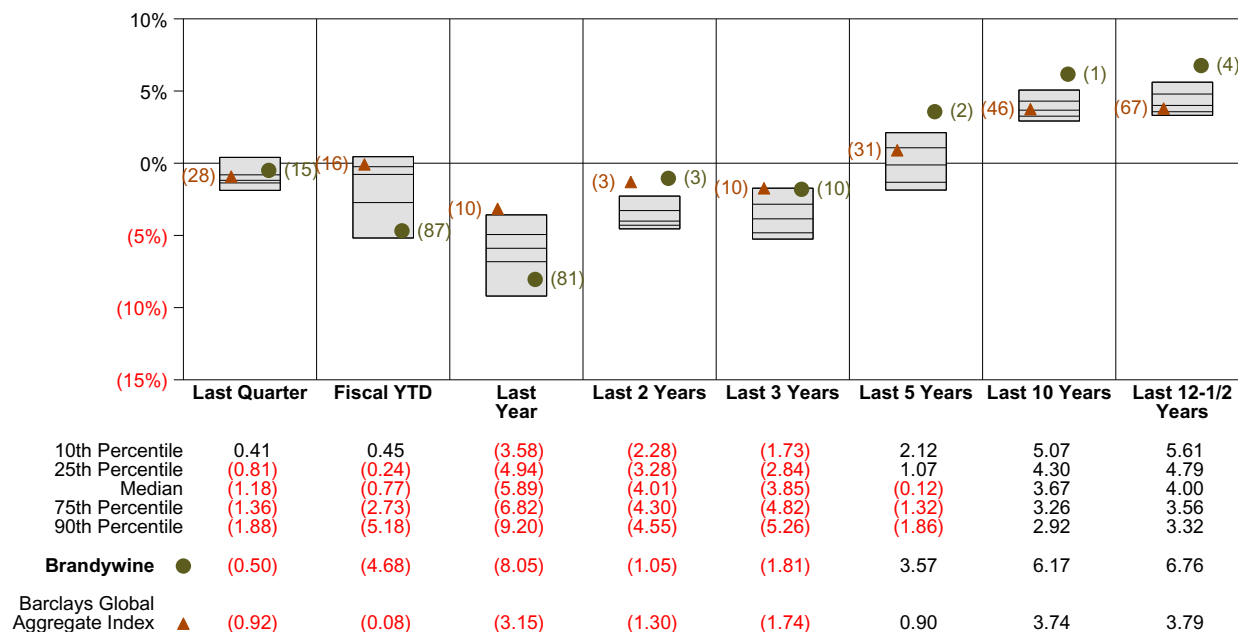
### Quarterly Summary and Highlights

- Brandywine's portfolio posted a (0.50)% return for the quarter placing it in the 15 percentile of the CAI Non-U.S. Fixed-Inc Style group for the quarter and in the 81 percentile for the last year.
- Brandywine's portfolio outperformed the Barclays Global Aggregate Index by 0.43% for the quarter and underperformed the Barclays Global Aggregate Index for the year by 4.89%.

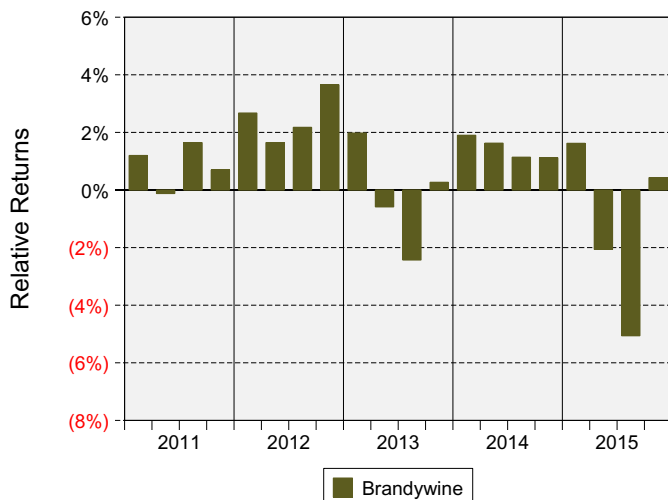
### Quarterly Asset Growth

Beginning Market Value	\$124,930,365
Net New Investment	\$-2,545,330
Investment Gains/(Losses)	\$-606,265
Ending Market Value	\$121,778,769

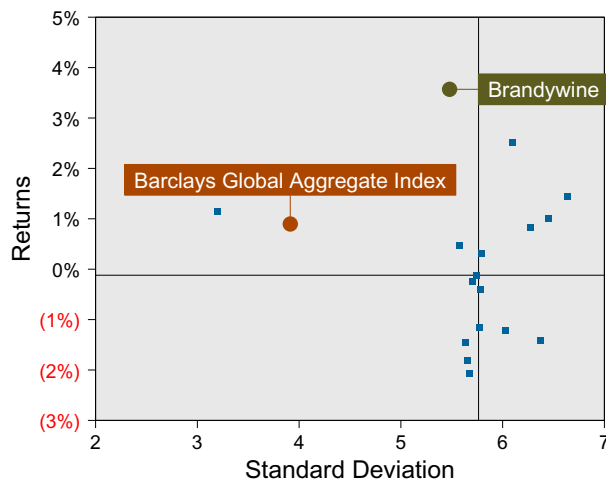
### Performance vs CAI Non-U.S. Fixed-Inc Style (Gross)



### Relative Returns vs Barclays Global Aggregate Index



### CAI Non-U.S. Fixed-Inc Style (Gross) Annualized Five Year Risk vs Return



## UBS Global Asset Management Period Ended December 31, 2015

### Investment Philosophy

UBS Global Asset Management's non-US fixed income portfolio's assets are invested in emerging markets debt on an opportunistic basis up to the stated maximum allocation of 5%. The account's non-US fixed income assets will be fully-invested at all times, but such assets may be invested in the UBS US Cash Management Prime Collective Fund for operational and risk management purposes. \*Citigroup Non-US Govt Index through 12/31/2009 and the Barclays Global Aggregate ex-US Index thereafter.

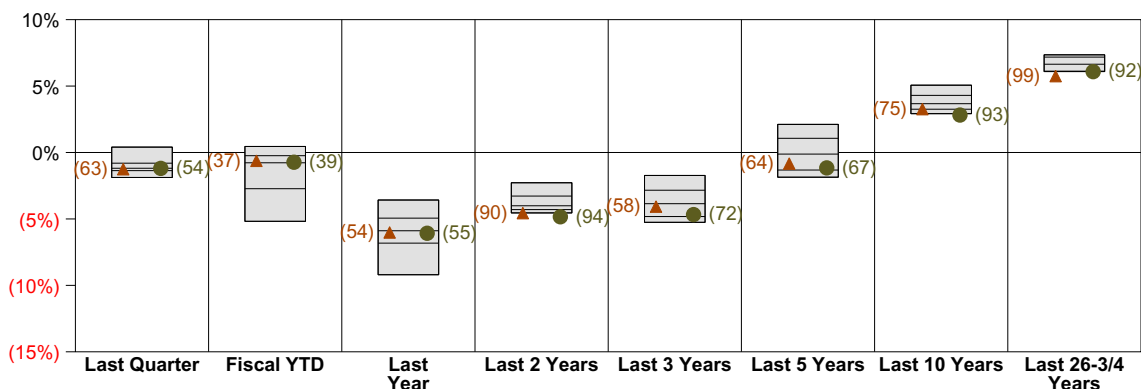
### Quarterly Summary and Highlights

- UBS Global Asset Management's portfolio posted a (1.20)% return for the quarter placing it in the 54 percentile of the CAI Non-U.S. Fixed-Inc Style group for the quarter and in the 55 percentile for the last year.
- UBS Global Asset Management's portfolio outperformed the Blended Benchmark\* by 0.06% for the quarter and underperformed the Blended Benchmark\* for the year by 0.06%.

### Quarterly Asset Growth

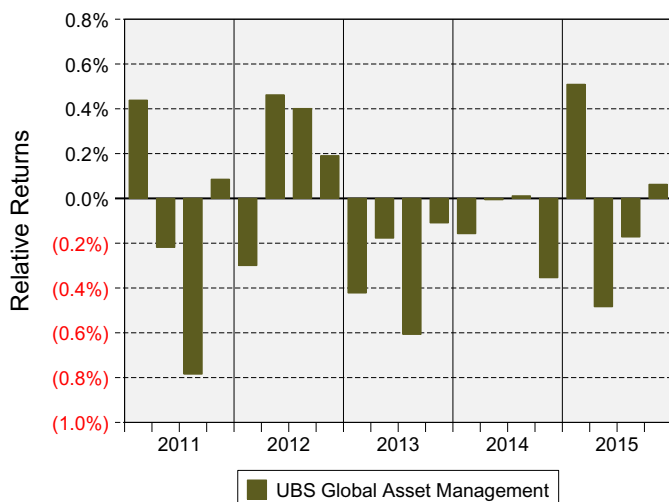
Beginning Market Value	\$99,749,879
Net New Investment	\$-82,048
Investment Gains/(Losses)	\$-1,193,664
Ending Market Value	\$98,474,167

### Performance vs CAI Non-U.S. Fixed-Inc Style (Gross)

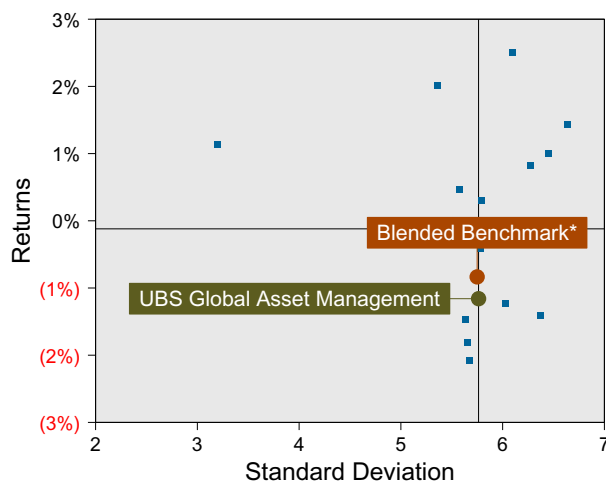


10th Percentile	0.41	0.45	(3.58)	(2.28)	(1.73)	2.12	5.07	7.35
25th Percentile	(0.81)	(0.24)	(4.94)	(3.28)	(2.84)	1.07	4.30	7.18
Median	(1.18)	(0.77)	(5.89)	(4.01)	(3.85)	(0.12)	3.67	6.64
75th Percentile	(1.36)	(2.73)	(6.82)	(4.30)	(4.82)	(1.32)	3.26	6.12
90th Percentile	(1.88)	(5.18)	(9.20)	(4.55)	(5.26)	(1.86)	2.92	6.09
<b>UBS Global Asset Management</b>	● (1.20)	(0.73)	(6.08)	(4.84)	(4.67)	(1.16)	2.82	6.08
<b>Blended Benchmark*</b>	▲ (1.26)	(0.62)	(6.02)	(4.56)	(4.07)	(0.84)	3.26	5.75

### Relative Return vs Blended Benchmark\*



### CAI Non-U.S. Fixed-Inc Style (Gross) Annualized Five Year Risk vs Return





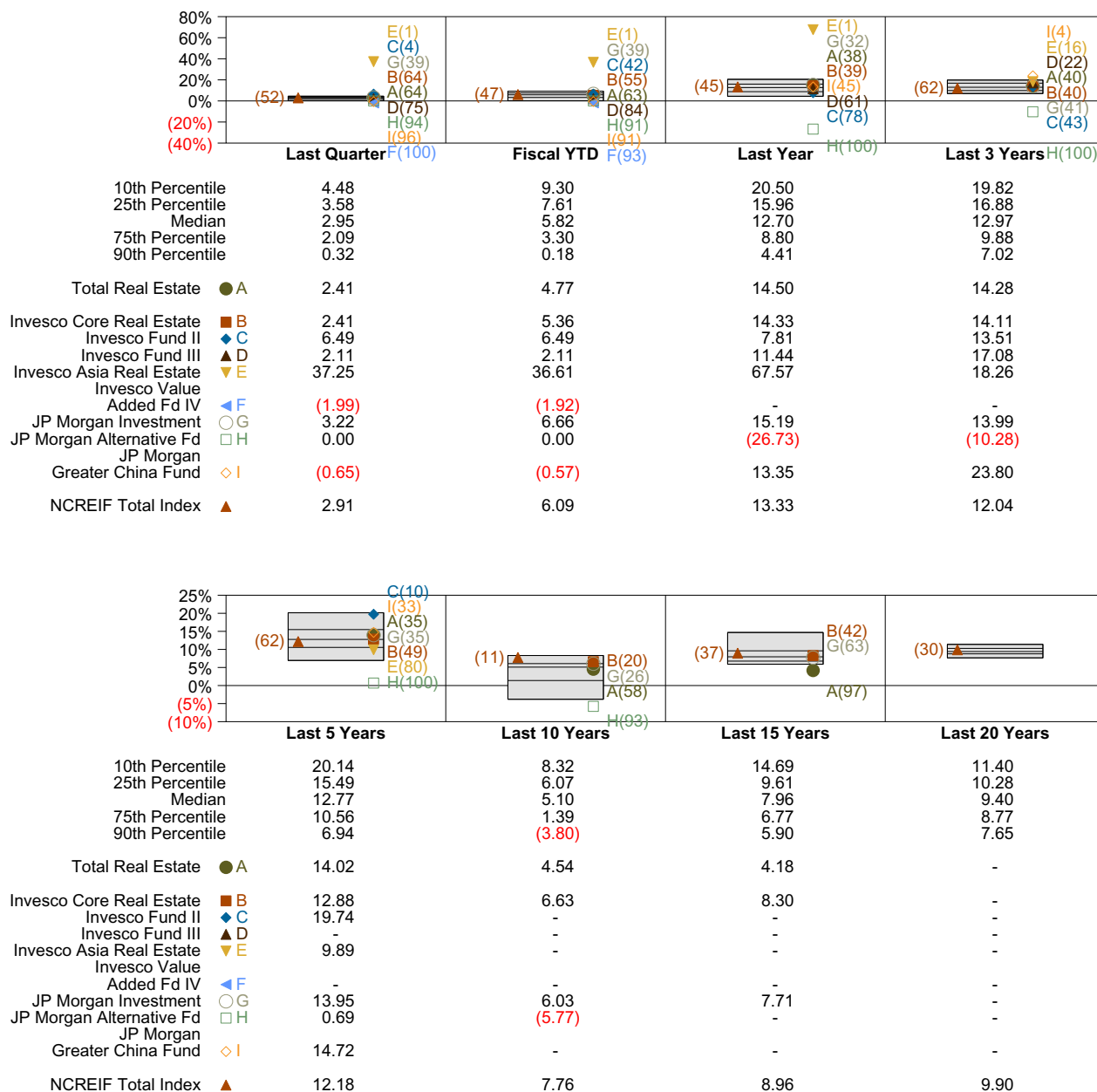
# North Dakota State Investment Board Pension Funds

## Performance vs Total Real Estate DB

### Periods Ended December 31, 2015

#### Return Ranking

The chart below illustrates fund rankings over various periods versus the Total Real Estate DB. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the Total Real Estate DB. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.





## TIR Teredo Period Ended December 31, 2015

### Investment Philosophy

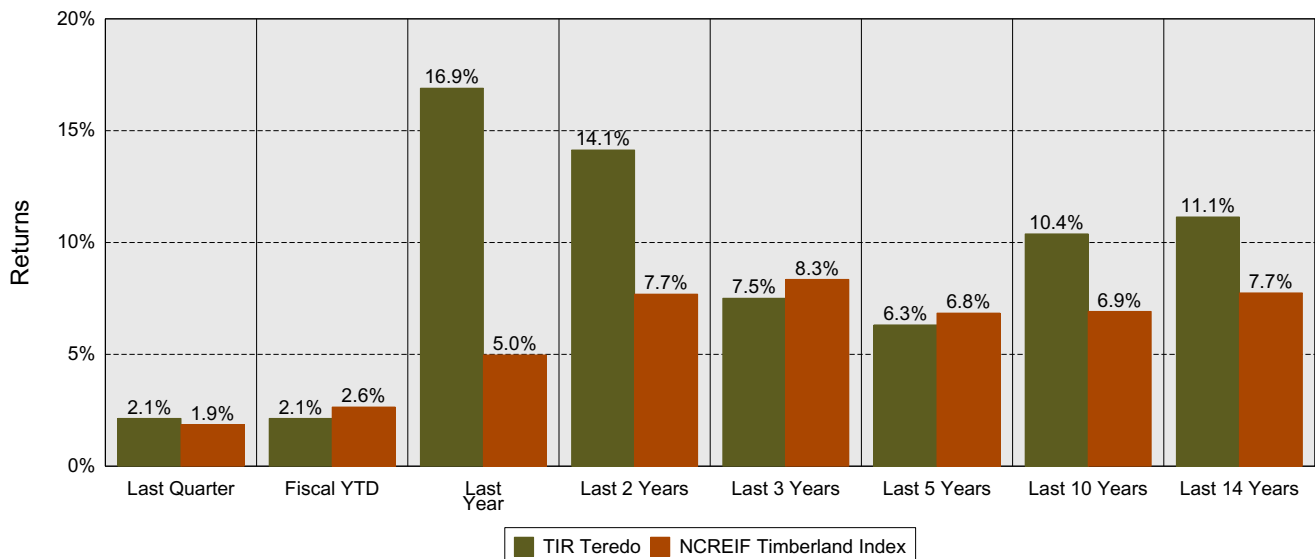
Teredo Timber LLC - The investment objective of Teredo is to provide competitive investment returns from increasing saw timber production through the 20 year term of the partnership. TIR's management strategy is to maximize saw timber volume by applying intensive forest management techniques which accelerate growth through the diameter class distribution. Periodic cash flows are produced from thinning and final harvests of the individual timber stands.

### Quarterly Summary and Highlights

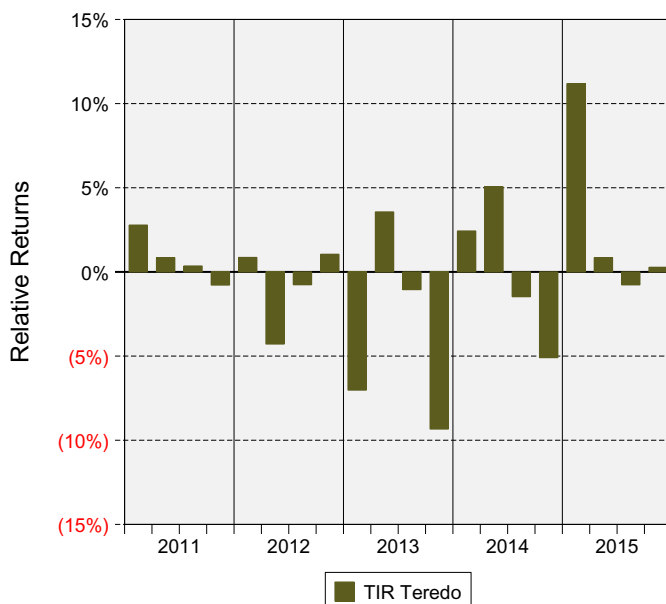
- TIR Teredo's portfolio posted a 2.13% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 1 percentile for the last year.
- TIR Teredo's portfolio outperformed the NCREIF Timberland Index by 0.27% for the quarter and outperformed the NCREIF Timberland Index for the year by 11.93%.

### Quarterly Asset Growth

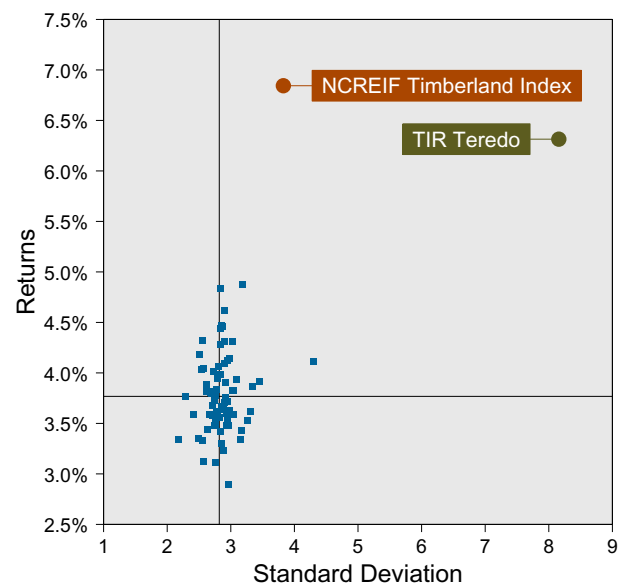
Beginning Market Value	\$60,894,655
Net New Investment	\$-29,600,038
Investment Gains/(Losses)	\$1,289,621
Ending Market Value	\$32,584,238



### Relative Return vs NCREIF Timberland Index



### CAI Core Bond Fixed-Inc Style (Gross) Annualized Five Year Risk vs Return



## TIR Springbank Period Ended December 31, 2015

### Investment Philosophy

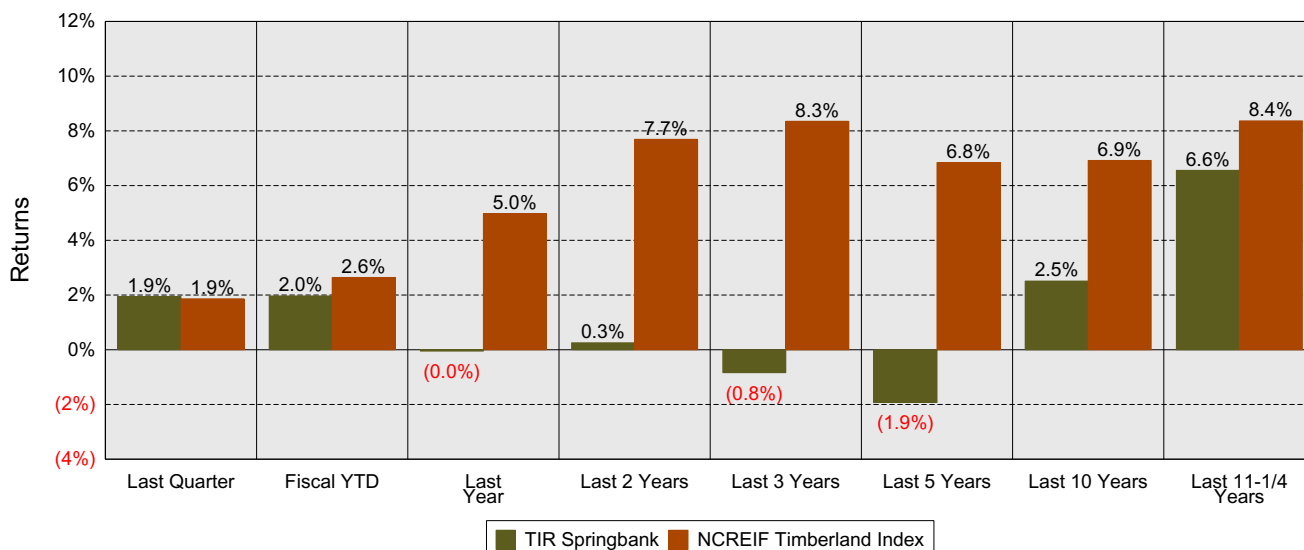
Springbank LLC - The investment objective of Springbank is to maximize long-term investment potential by means of the formation of a dedicated land management group, intensive timber management to increase timber production, the coordination of timber harvesting with land management activities and direct marketing and selective real estate partnerships.

### Quarterly Summary and Highlights

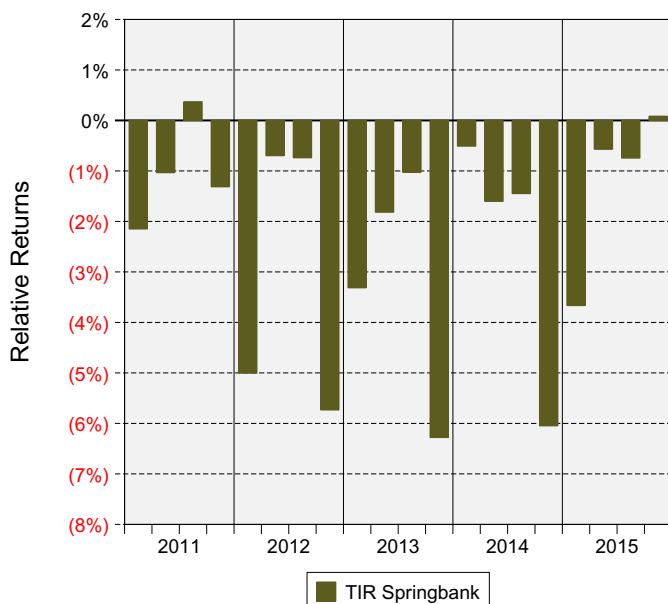
- TIR Springbank's portfolio posted a 1.94% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 89 percentile for the last year.
- TIR Springbank's portfolio outperformed the NCREIF Timberland Index by 0.08% for the quarter and underperformed the NCREIF Timberland Index for the year by 5.02%.

### Quarterly Asset Growth

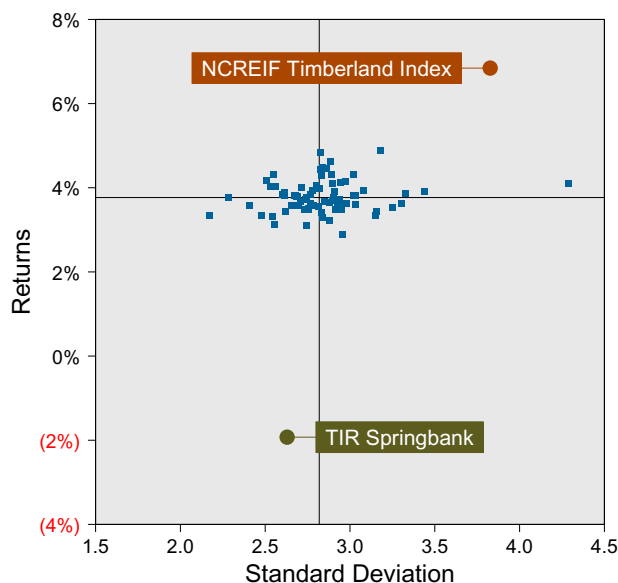
Beginning Market Value	\$116,504,483
Net New Investment	\$-400,003
Investment Gains/(Losses)	\$2,260,742
Ending Market Value	\$118,365,222



### Relative Return vs NCREIF Timberland Index



### CAI Core Bond Fixed-Inc Style (Gross) Annualized Five Year Risk vs Return





## JP Morgan Asian Infrastructure Period Ended December 31, 2015

### Investment Philosophy

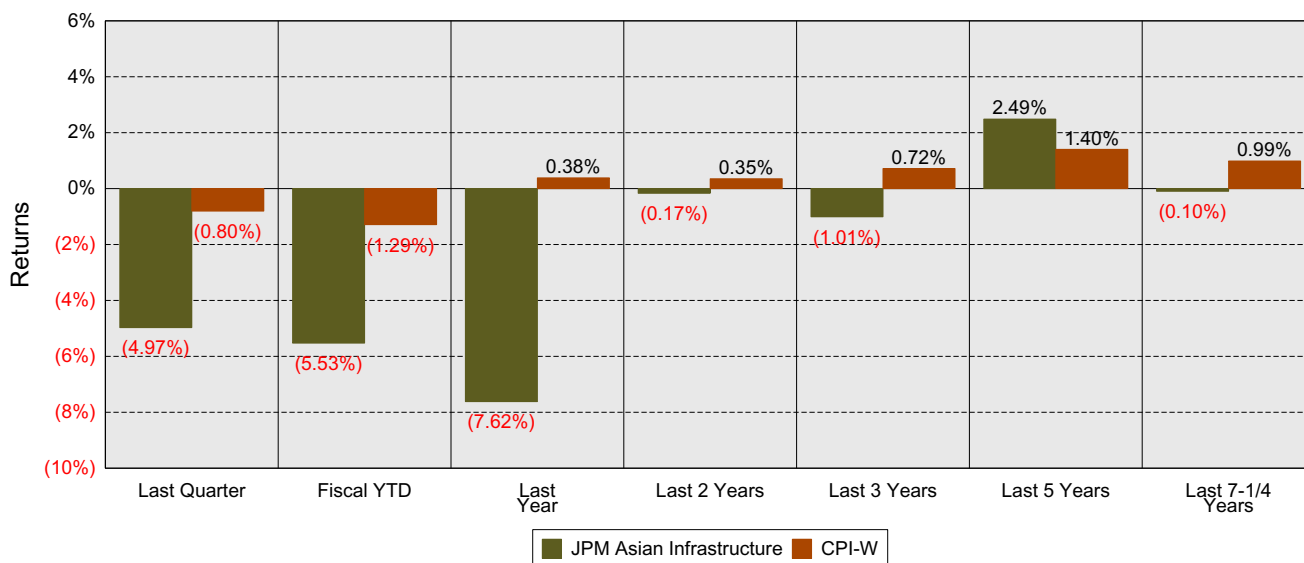
The JPMorgan Asian Infrastructure & Related Resources Opportunity ("AIRRO") Fund seeks to invest in infrastructure and related resources opportunities across the greater Asia Pacific region. The Fund seeks to invest in a broad range of assets, including: core infrastructure, power both from conventional and renewable sources, communications, water and waste-water, public works, urban development and other "social" infrastructure assets and related resources.

### Quarterly Summary and Highlights

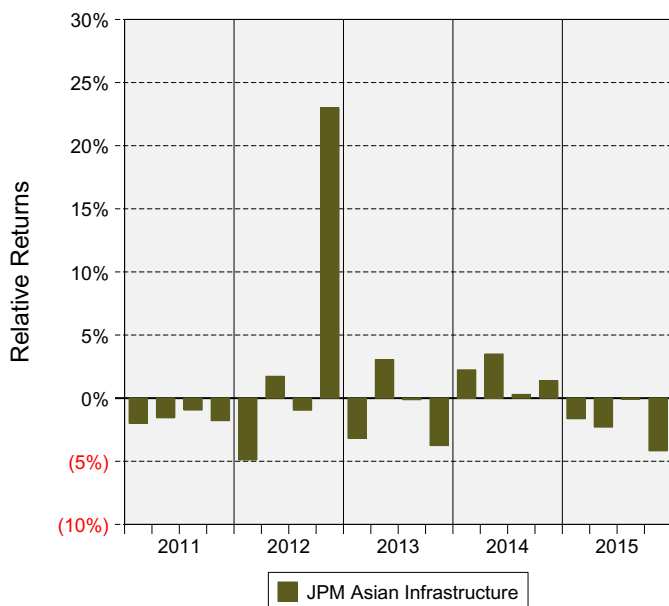
- JPM Asian Infrastructure's portfolio underperformed the CPI-W by 4.17% for the quarter and underperformed the CPI-W for the year by 8.00%.

### Quarterly Asset Growth

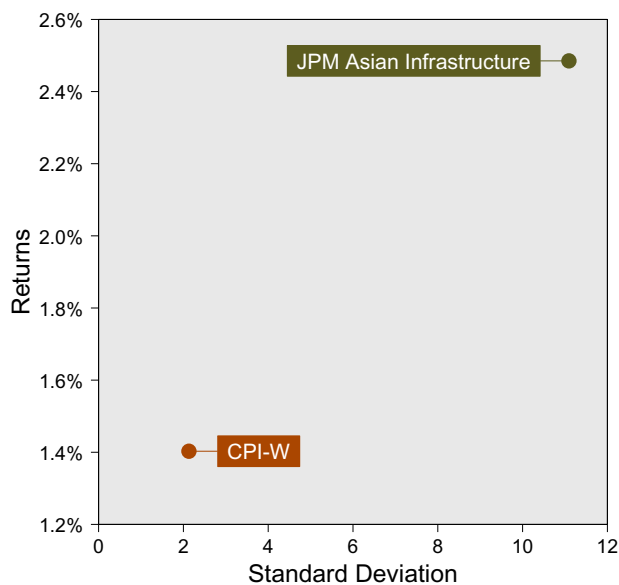
Beginning Market Value	\$30,600,000
Net New Investment	\$-25,018
Investment Gains/(Losses)	\$-1,521,392
Ending Market Value	\$29,053,590



### Relative Return vs CPI-W



### Annualized Five Year Risk vs Return



## JPM Infrastructure Fund Period Ended December 31, 2015

### Investment Philosophy

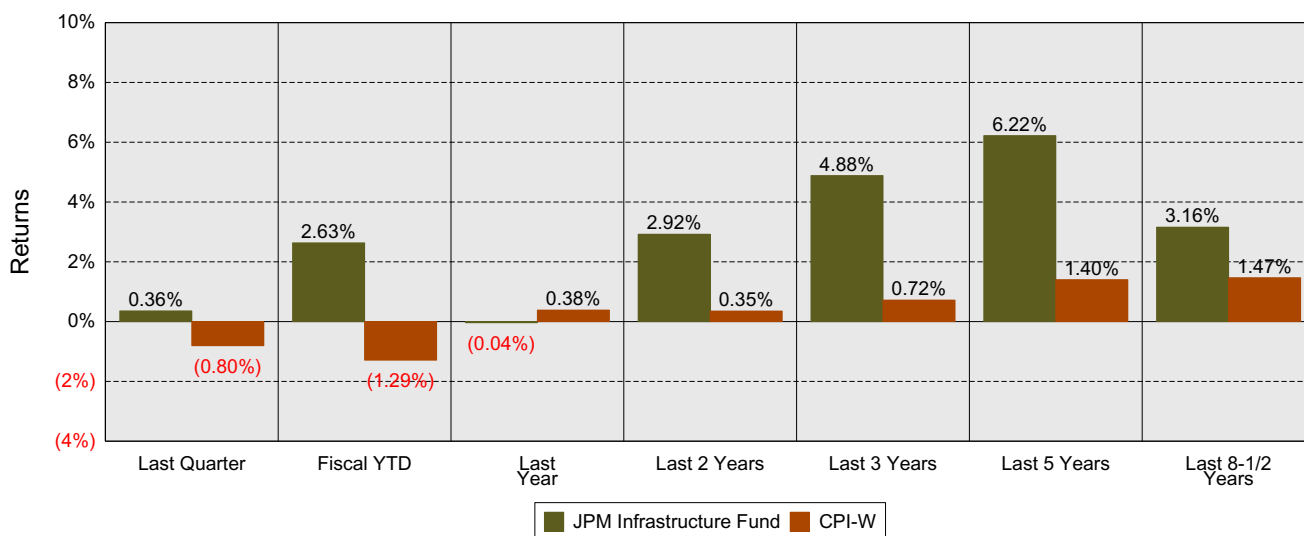
The only open-ended private commingled infrastructure fund in the U.S., the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports.

### Quarterly Summary and Highlights

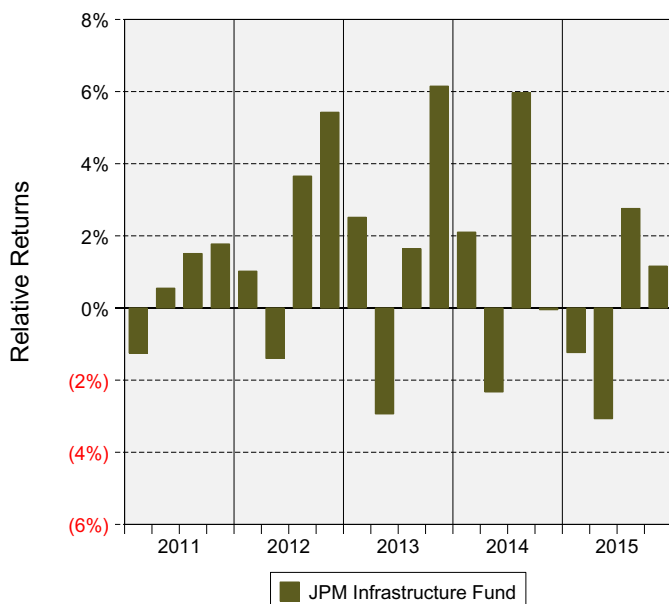
- JPM Infrastructure Fund's portfolio outperformed the CPI-W by 1.16% for the quarter and underperformed the CPI-W for the year by 0.42%.

### Quarterly Asset Growth

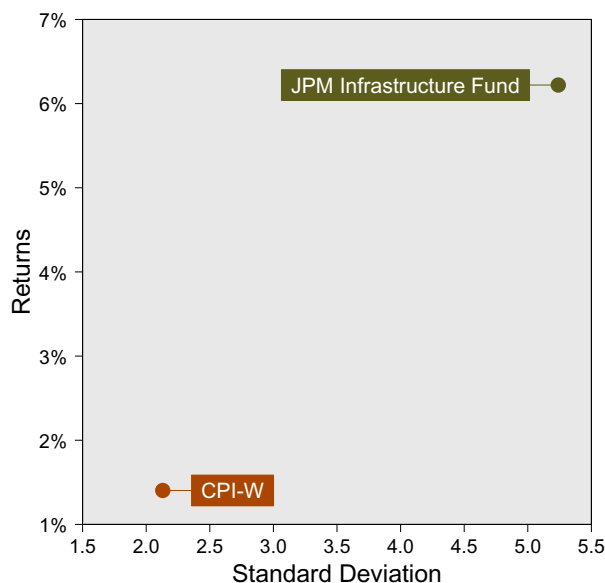
Beginning Market Value	\$139,850,021
Net New Investment	\$-384,419
Investment Gains/(Losses)	\$498,197
Ending Market Value	\$139,963,800



### Relative Return vs CPI-W



### Annualized Five Year Risk vs Return



## Grosvenor Cust. Infrastructure Period Ended December 31, 2015

### Investment Philosophy

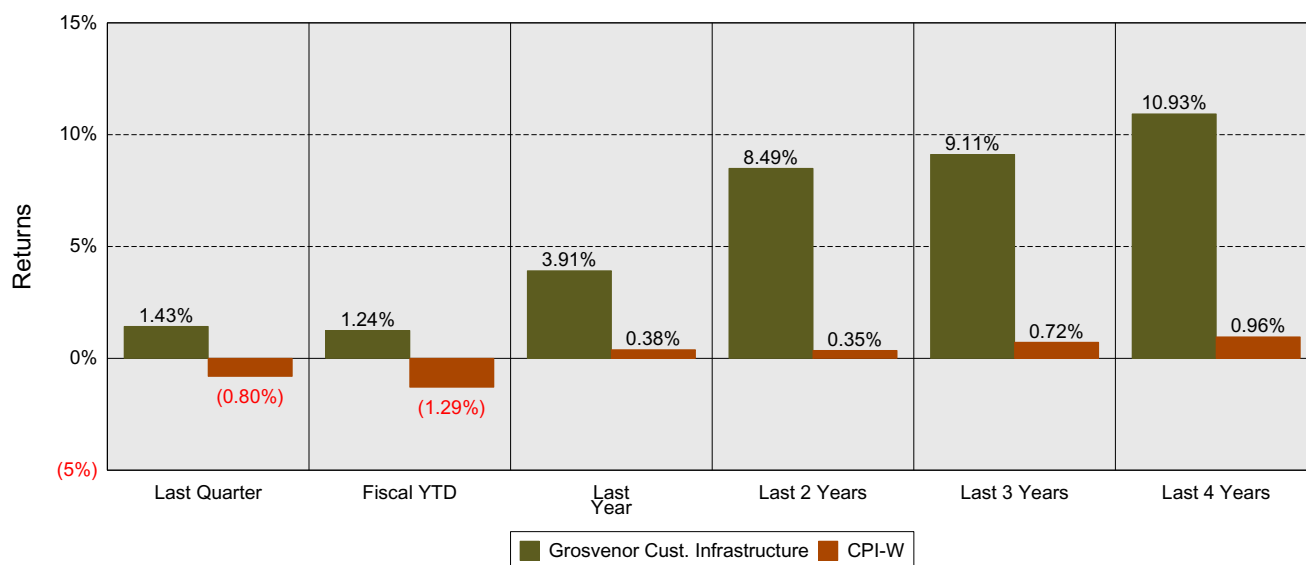
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%).

### Quarterly Summary and Highlights

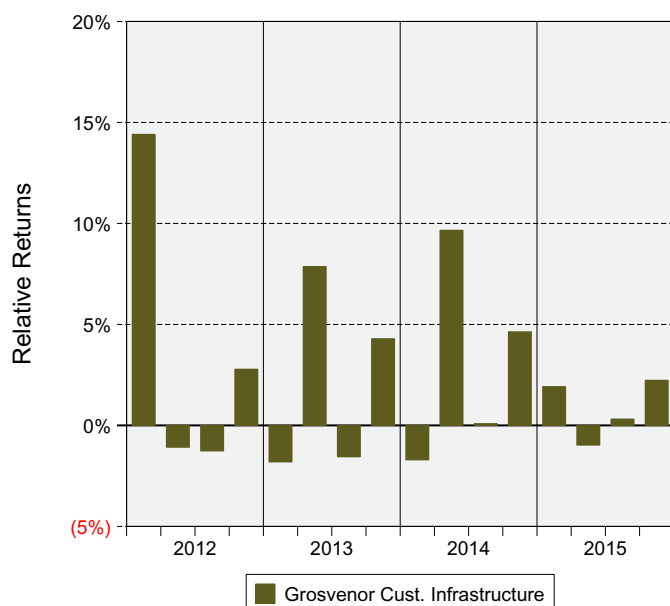
- Grosvenor Cust. Infrastructure's portfolio outperformed the CPI-W by 2.23% for the quarter and outperformed the CPI-W for the year by 3.53%.

### Quarterly Asset Growth

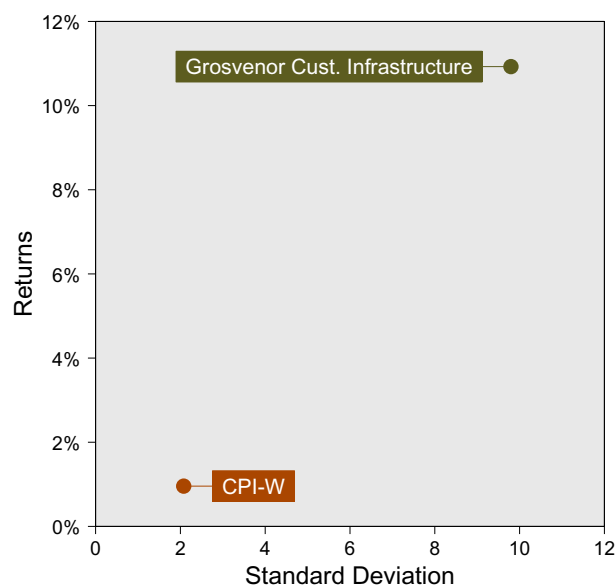
Beginning Market Value	\$40,020,232
Net New Investment	\$-1,754,397
Investment Gains/(Losses)	\$549,484
Ending Market Value	\$38,815,319



### Relative Return vs CPI-W



### Annualized Four Year Risk vs Return



# Grosvenor Cust. Infrastructure II

## Period Ended December 31, 2015

### Investment Philosophy

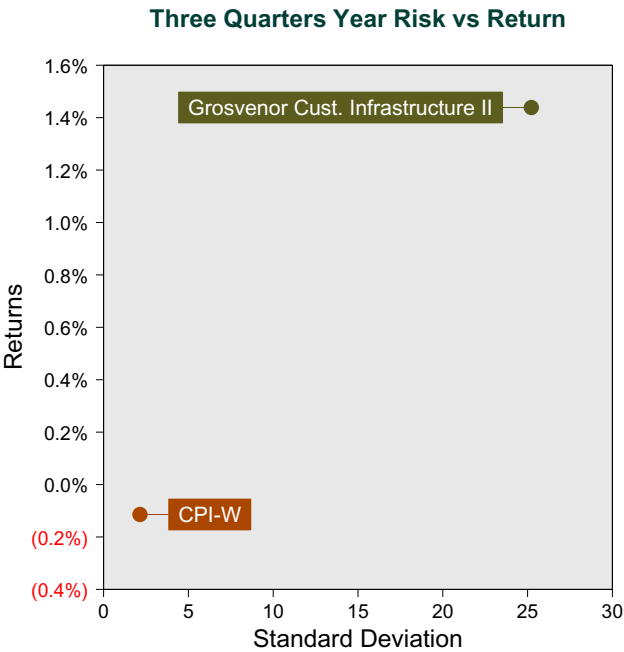
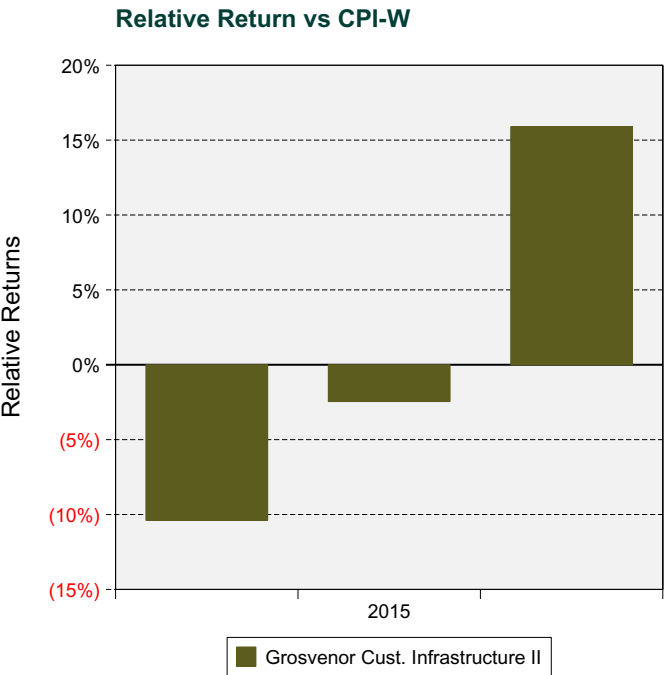
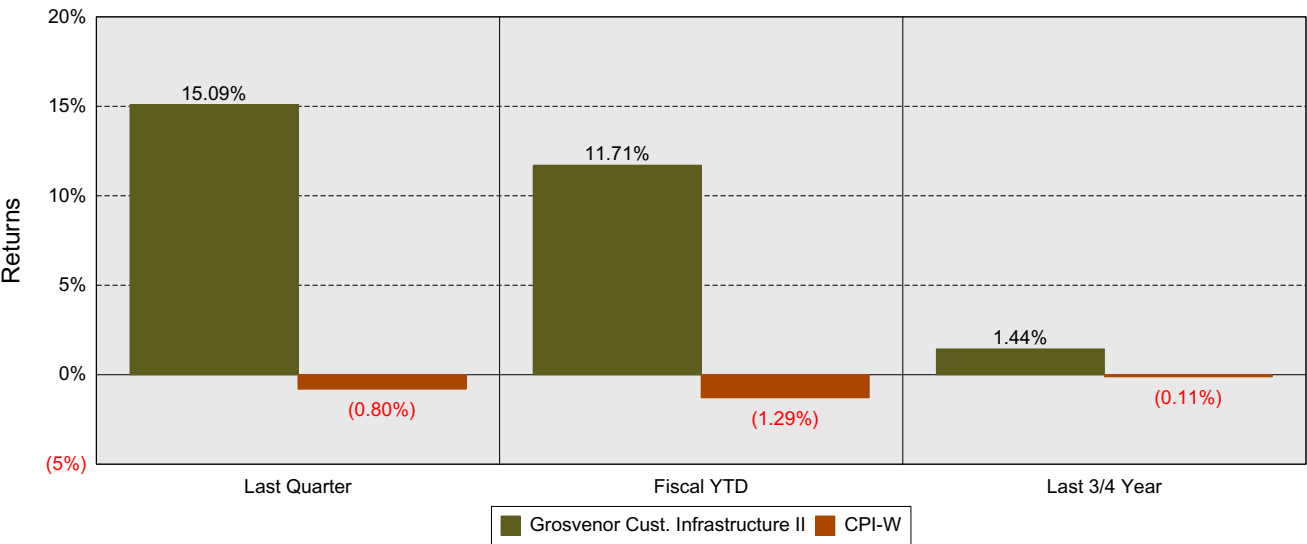
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%).

### Quarterly Summary and Highlights

- Grosvenor Cust. Infrastructure II's portfolio outperformed the CPI-W by 15.90% for the quarter and outperformed the CPI-W for the three-quarter year by 1.55%.

### Quarterly Asset Growth

Beginning Market Value	\$4,359,190
Net New Investment	\$2,801,191
Investment Gains/(Losses)	\$745,375
Ending Market Value	\$7,905,756





## Research and Educational Programs

The Callan Investments Institute provides research that keeps clients updated on the latest industry trends while helping them learn through carefully structured educational programs.

### Recent Research

Please visit [www.callan.com/research](http://www.callan.com/research) to see all of our publications.

**Video: The Education of Beta** In this brief video, Eugene Podkaminer describes the reasons he decided to explore the “smart beta” topic in detail.

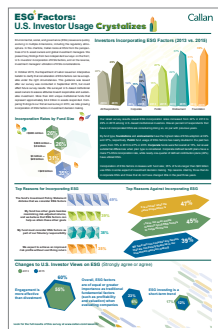


**2015 Alternative Investments Survey** Our 2015 Alternative Investments Survey provides institutional investors a current report on asset allocation trends and investor practices.

**Inside Callan's Database, 3rd Quarter 2015** This report graphs performance and risk data from Callan's proprietary database alongside relevant market indices.

**Capital Market Review, 3rd Quarter 2015** Insights on the economy and recent performance in equities, fixed income, alternatives, real estate, and more.

**Market Pulse Flipbook, 3rd Quarter 2015** A quarterly market reference guide covering investment and fund sponsor trends in the U.S. economy, U.S. and non-U.S. equities and fixed income, alternatives, and defined contribution.



**ESG Factors: U.S. Investor Usage Crystalizes** This charticle looks at ESG from the perspectives of U.S. asset owners and global investment managers, revealing growing incorporation of ESG factors in investment decision making.

**The Department of Labor Weighs in on ESG: Key Takeaways from Interpretive Bulletin 2015-01** A summary of the DOL's Interpretive Bulletin 2015-011, relating to the fiduciary standard under ERISA considering economically targeted investments (ETIs), and the implications for investors.

**Hedge Fund Monitor, 3rd Quarter 2015** Author Jim McKee provides quarterly performance and a snapshot of the asset class. This quarter's cover story: “Beyond the Glitter and Regret: Reassessing Hedge Funds' Role in Asset Allocation.”

**Video: In the Spotlight-Target Date Funds** Lori Lucas discusses some of the trends that are causing target date funds to have lower fees.

**ESG Interest and Implementation Survey** Results of Callan's third annual survey to assess the status of ESG factor integration in the U.S. institutional market.

**DC Observer, 3rd Quarter 2015** Cover story: Meeting the Challenge of Managed Account Selection and Evaluation.

**Grading the Pension Protection Act, Ten Years Later: Success Stories and Near Misses** Callan grades the performance of nine key PPA provisions over the past decade, listing them from least to most effective.

**Private Markets Trends, Fall 2015** Gary Robertson summarizes the market environment, recent events, performance, and other issues involving private equity.

## Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: <https://www.callan.com/education/CII/>

The **National Conference**, to be held January 25–27 in San Francisco, consists of general sessions with presentations by world, political, arts, science, and investment industry speakers. The general sessions are followed by smaller breakout sessions on timely industry topics led by Callan specialists. Attendees include plan/fund sponsors, investment managers, and Callan associates.

Save the date for our **Regional Workshops**: June 28 in Atlanta, June 29 in San Francisco, October 25 in New York, and October 26 in Chicago. Also mark your calendars for our fall **Investment Manager Conference**, September 11–13.

For more information about research or educational events, please contact Anna West: 415.974.5060 / [institute@callan.com](mailto:institute@callan.com)

## The Center for Investment Training Educational Sessions

The Center for Investment Training, better known as the “Callan College,” provides a foundation of knowledge for industry professionals who are involved in the investment decision-making process. It was founded in 1994 to provide clients and non-clients alike with basic- to intermediate-level instruction. Our next session is:

### Introduction to Investments

Atlanta, GA, April 19–20, 2016

San Francisco, CA, July 19–20, 2016

Chicago, IL, October 18–19, 2016

This session familiarizes fund sponsor trustees, staff, and asset management advisors with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals who have less than two years of experience with asset-management oversight and/or support responsibilities. Tuition for the Introductory “Callan College” session is \$2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

### Customized Sessions

The “Callan College” is equipped to customize a curriculum to meet the training and educational needs of a specific organization. These tailored sessions range from basic to advanced and can take place anywhere—even at your office.

Learn more at <https://www.callan.com/education/college/> or contact Kathleen Cunnie: 415.274.3029 / [cunnie@callan.com](mailto:cunnie@callan.com)

## Education: By the Numbers

500

Attendees (on average) of the Institute's annual National Conference

50+

Unique pieces of research the Institute generates each year

3,300

Total attendees of the “Callan College” since 1994

1980

Year the Callan Investments Institute was founded



“We think the best way to learn something is to teach it. Entrusting client education to our consultants and specialists ensures that they have a total command of their subject matter. This is one reason why education and research have been cornerstones of our firm for more than 40 years.”

Ron Peyton, Chairman and CEO



## List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance Department.

Manager Name
1607 Capital Partners, LLC
Aberdeen Asset Management
Acadian Asset Management, Inc.
Advisory Research
Affiliated Managers Group
AllianceBernstein
Allianz Global Investors U.S. LLC
Allianz Life Insurance Company of North America
AlphaOne Investment Services
American Century Investment Management
Analytic Investors
Apollo Global Management
AQR Capital Management
Ares Management
Ariel Investments
Aristotle Capital Management
Artisan Partners Limited
Atlanta Capital Management Co., L.L.C.
AXA Rosenberg Investment Management
Babson Capital Management LLC
Bailard
Baillie Gifford Overseas Limited
Baird Advisors
Bank of America
Baring Asset Management
Baron Capital Management
BlackRock
Blue Vista Capital Management
BMO Asset Management
BNP Paribas Investment Partners
BNY Mellon Asset Management
Boston Company Asset Management, LLC (The)
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brown Brothers Harriman & Company
Cadence Capital Management

Manager Name
Calamos Advisors
Capital Group
CastleArk Management, LLC
Causeway Capital Management
Champlain Investment Partners
Channing Capital Management, LLC
Charles Schwab Investment Management
Chartwell Investment Partners
ClearBridge Investments, LLC (fka ClearBridge Advisors)
Cohen & Steers
Columbia Management Investment Advisors, LLC
Columbus Circle Investors
Corbin Capital Partners
Cornerstone Investment Partners, LLC
Cramer Rosenthal McGlynn, LLC
Crawford Investment Council
Credit Suisse Asset Management
Crestline Investors
Cutwater Asset Management
DDJ Capital Management
DE Shaw Investment Management LLC
Delaware Investments
DePrince, Race & Zollo, Inc.
Deutsche Asset & Wealth Management
Diamond Hill Investments
Duff & Phelps Investment Mgmt.
Eagle Asset Management, Inc.
EARNEST Partners, LLC
Eaton Vance Management
EnTrust Capital Inc.
Epoch Investment Partners
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
First Eagle Investment Management
First Hawaiian Bank Wealth Management Division
First State Investments

Manager Name
Fisher Investments
FLAG Capital Management
Fort Washington Investment Advisors, Inc.
Franklin Templeton
Fred Alger Management Co., Inc.
Fuller & Thaler Asset Management
GAM (USA) Inc.
GE Asset Management
Goldman Sachs Asset Management
Grand-Jean Capital Management
GMO (fka Grantham, Mayo, Van Otterloo & Co., LLC)
Gresham Investment Management, LLC
Guggenheim Investments Asset Management (fka Security Global)
Harbor Capital
Harding Loevner LP
Harrison Street Real Estate Capital
Hartford Funds
Hartford Investment Management Co.
Henderson Global Investors
Hotchkis & Wiley
HSBC Global Asset Management
Income Research & Management
Insight Investment Management
Institutional Capital LLC
INTECH Investment Management
Invesco
Investec Asset Management
Janus Capital Group (fka Janus Capital Management, LLC)
Jensen Investment Management
J.P. Morgan Asset Management
KeyCorp
Kopernik Global Investors
Lazard Asset Management
LMCG Investments (fka Lee Munder Capital Group)
Legal & General Investment Management America
Lincoln National Corporation
Logan Circle Partners, L.P.
The London Company
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
Lyrical Partners
MackKay Shields LLC
Man Investments
Manulife Asset Management
Martin Currie
Marvin & Palmer Associates, Inc.
MFS Investment Management
MidFirst Bank
Millstreet Capital Management
Mondrian Investment Partners Limited
Montag & Caldwell, Inc.
Morgan Stanley Investment Management
Mountain Lake Investment Management LLC
MUFG Union Bank, N.A.
Neuberger Berman, LLC (fka, Lehman Brothers)
Newton Capital Management
Northern Lights Capital Group

Manager Name
Northern Trust Asset Management
Nuveen Investments Institutional Services Group LLC
Old Mutual Asset Management
OppenheimerFunds, Inc.
Pacific Investment Management Company
Palisade Capital Management LLC
PanAgora Asset Management
Paradigm Asset Management
Parametric Portfolio Associates
Peregrine Capital Management, Inc.
PineBridge Investments (formerly AIG)
Pinnacle Asset Management
Pioneer Investment Management, Inc.
PNC Capital Advisors, LLC (fka Allegiant Asset Mgmt)
Principal Global Investors
Private Advisors
Prudential Investment Management, Inc.
Putnam Investments, LLC
Pyramis Global Advisors
Pzena Investment Management, LLC
RBC Global Asset Management (U.S.) Inc.
Regions Financial Corporation
Riverbridge Partners LLC
Rothschild Asset Management, Inc.
Royce & Associates
RS Investments
Russell Investment Management
Santander Global Facilities
Schroder Investment Management North America Inc.
Scout Investments
SEI Investments
SEIX Investment Advisors, Inc.
Smith Graham and Company
Smith Group Asset Management
Standard Life Investments
Standish (fka, Standish Mellon Asset Management)
State Street Global Advisors
Stone Harbor Investment Partners, L.P.
Systematic Financial Management
T. Rowe Price Associates, Inc.
Taplin, Canida & Habacht
TIAA-CREF
TCW Asset Management Company
Tocqueville Asset Management
UBS Asset Management
Van Eck
Versus Capital Group
Victory Capital Management Inc.
Vontobel Asset Management
Voya Investment Management (fka ING)
Waddell & Reed Asset Management Group
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Capital Management
Wells Fargo Private Bank
Western Asset Management Company
Westwood Management Corp.
William Blair & Co., Inc.